

### Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) governs the issuance of Federal regulations that require unfunded mandates. An unfunded mandate is a regulation that requires a State, local, or tribal government or the private sector to incur direct costs without the Federal Government's having first provided the funds to pay those costs. This proposed rule would not impose an unfunded mandate.

### Taking of Private Property

This proposed rule would not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

### Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

### Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not economically significant and does not cause an environmental risk to health or risk to safety that may disproportionately affect children.

### Environment

The Coast Guard considered the environmental impact of this proposed rule and concluded that, under figure 2–1, paragraph 32(e), of Commandant Instruction M16475.IC, this proposed rule is categorically excluded from further environmental documentation. A “Categorical Exclusion Determination” is available in the docket where indicated under

**ADDRESSES.**

### List of Subjects in 33 CFR Part 117

Bridges.

For the reasons set out in the preamble, the Coast Guard proposes to amend Part 117 of Title 33, Code of Federal Regulations, as follows:

### PART 117—DRAWBRIDGE OPERATION REGULATIONS

1. The authority citation for Part 117 continues to read as follows:

**Authority:** 33 U.S.C. 499; 49 CFR 1.46; 33 CFR 1.05–1(g); section 117.255 also issued

under the authority of Pub. L. 102–587, 106 Stat. 5039.

2. In § 117.505, paragraph (d) is removed; paragraph (e) is re-designated as paragraph (d); and paragraph (c) is revised to read as follows:

#### § 117.505 Terrebonne Bayou.

\* \* \* \* \*

(c) The draws of the S3087 Bridge, mile 33.9, the Howard Ave Bridge, mile 35.0, and the Daigleville Bridge, mile 35.5 at Houma, shall open on signal if at least four hours notice is given; except the draws need not open for the passage of vessels Monday through Friday, except Federal holidays, from 6 a.m. to 8 a.m. and from 4 p.m. to 6 p.m.

\* \* \* \* \*

Dated: March 5, 2001.

**K.J. Eldridge,**

*Captain, U.S. Coast Guard, Commander,  
Eighth Coast Guard District Acting.*

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## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 216

[Docket No. 990927266-0240-02;  
I.D. 072699A]

RIN 0648-AM62

### Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed rule; request for comment.

**SUMMARY:** NMFS has received an application from the U.S. Navy requesting a Letter of Authorization (LOA) for the take of small numbers of marine mammals by harassment incidental to Navy operations of the Surveillance Towed Array Sensor System (SURTASS) Low Frequency Active (LFA) Sonar. By this document, NMFS is proposing regulations to govern that take. In order to issue the LOA and issue final regulations governing the take, NMFS must determine that the taking will have a negligible impact on the affected species and stocks of marine mammals, will (if appropriate through implementation of appropriate mitigation measures) be at

the lowest level practicable, and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses. NMFS invites comment on the application, and the regulations.

**DATES:** Comments must be postmarked no later than May 3, 2001. A petition requesting NMFS to hold a public hearing must be submitted no later than April 3, 2001. Comments will not be accepted if submitted via e-mail or the Internet.

Comments regarding the burden-hour estimate or any other aspect of the collection of information requirement contained in this rule should be sent to the Chief, and to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attention: NOAA Desk Officer, Washington, DC 20503.

**ADDRESSES:** Comments should be addressed to Donna Wieting, Chief, Marine Mammal Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3226. A copy of the application, a list of references used in this document and a list of principal commenters on this action, are available and may be obtained by writing to this address or by telephoning the contact listed here (see **FOR FURTHER INFORMATION CONTACT**).

**FOR FURTHER INFORMATION CONTACT:** Kenneth R. Hollingshead (301) 713–2322, ext. 128.

#### SUPPLEMENTARY INFORMATION:

#### Background

Section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 et seq.) directs the Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and regulations are issued.

Permission may be granted for periods of 5 years or less if the Secretary finds that the taking will be small, have a negligible impact on the species or stock(s) of affected marine mammals, and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses, and if regulations are prescribed setting forth the permissible methods of taking and the requirements pertaining to the monitoring and reporting of such taking.

### Summary of Request

On August 12, 1999, NMFS received an application from the U.S. Navy requesting a small take exemption under section 101(a)(5)(A) of the MMPA for the taking of marine mammals incidental to operation of the SURTASS LFA sonar for a period of time not to exceed 5 years, beginning in FY 2000. SURTASS LFA sonar will operate a maximum of 4 ship systems in the 10 geographic operating regions in which SURTASS LFA sonar could potentially operate. There would be a maximum of four SURTASS LFA sonar systems with a nominal maximum of two systems at sea at any one time.

### Description of the Activity

The SURTASS LFA sonar system is a long-range, low frequency (between 100 and 500 Hertz) sonar that has both active and passive components. It does not rely on detection of noise generated by the target. The active component of the system is a set of low frequency (LF) acoustic transmitting source elements (called projectors) suspended from a cable from underneath a ship. The projectors are devices that produce the active sound or pulse.

The purpose of SURTASS LFA sonar is to provide the Navy with a reliable and dependable system for long-range detection of quieter, harder-to-find submarines. LF sound travels in seawater more effectively and for greater distances than higher frequency sound used by most other active sonars. The SURTASS LFA sonar system would meet the Navy's need for improved detection and tracking of new-generation submarines at a longer range. This would maximize the opportunity for U.S. armed forces to safely react to, and defend against, potential submarine threats while remaining a safe distance beyond a submarine's effective weapons range.

The typical SURTASS LFA sonar signal is not a constant tone, but rather a transmission of various waveforms that vary in frequency and duration. A complete sequence of sound transmissions is referred to as a "ping" and can last for as short as 6 seconds (sec) to as long as 100 sec. The time between pings is typically from 6 to 15 minutes. Average duty cycle (ratio of sound "on" time to total time) can be controlled but is less than 20 percent; typical duty cycle is between 10 and 20 percent.

The passive or listening component of the system is SURTASS, which detects returning echoes from submerged objects, such as submarines, through the use of hydrophones. The hydrophones

are mounted on a horizontal array that is towed behind the ship. The SURTASS LFA sonar ship maintains a minimum speed of 3.0 knots (5.6 km/hr; 3.4 mi/hr).

The Navy anticipates that a nominal SURTASS LFA sonar deployment schedule for a single vessel would involve about 270 days/year at sea (underway). A nominal at-sea mission would occur over a 30-day period, made up of two 9-day exercise segments. Active sonar operations could be conducted up to 20 hrs during an exercise day, although the system would actually be transmitting for only a maximum of 4 hrs/day (resulting in 432 hrs of active transmission time per year for each SURTASS LFA sonar system in operation based on a maximum duty cycle of 20 percent). The remaining 12 days of the at-sea mission would be spent in transit or repositioning the vessel. In a nominal year there could be a maximum of 9 missions, six of which would involve the employment of SURTASS LFA sonar in the active mode and three of which would employ the SURTASS LFA sonar in the passive mode. Between missions, an estimated 95 days would be spent in port for upkeep and repair. With two vessels in the Pacific-Indian Ocean area and two vessels in the Atlantic Ocean-Mediterranean Sea area, there could be up to 12 operations in each of these oceanic areas per year.

At present, only one SURTASS LFA sonar system is available for deployment. A second SURTASS LFA sonar system is expected to be available in FY 2001. The third and fourth systems are tentatively planned for FY 2003 and FY 2004, but their delivery may be postponed until after FY 2005. With 4 systems, a nominal maximum of two vessels would be at sea at any one time. As a result, under 5-year regulations NMFS proposes to authorize marine mammal harassment takings for 2 SURTASS LFA sonar vessels for FY 2000 through FY 2002, 3 vessels for FY 2003, and 4 vessels for FY 2004, recognizing, however, that there may not be more than 2 vessels operating within the 5-year window of these proposed regulations.

### Comments and Responses

On October 22, 1999 (64 FR 57026), NMFS published an Advance Notice of Proposed Rulemaking (ANPR) on the U.S. Navy application and invited interested persons to submit comments, information, and suggestions concerning the application and the structure and content of regulations, if the application is accepted. During the 30-day comment period on that notice, significant

comments were received from several organizations and individuals. A list of organizations and individuals whose comments are analyzed in this document is available upon request. Additionally, a large number of letters, form letters, and petitions were received. Comments regarding NMFS' responsibilities under the MMPA, the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) are addressed in this document. Comments to the Navy regarding the Navy's draft Overseas Environmental Impact Statement/Environmental Impact Statement (OEIS/EIS) that were attached to the comments on the ANPR, and those comments regarding the scope, content, and adequacy of the Navy draft OEIS/EIS, and the Navy's marine mammal scientific research program have been addressed in the Navy's Final OEIS/EIS.

### Activity Concerns

*Comment 1:* Numerous commenters were concerned that the Navy's SURTASS LFA sonar was not viable, or was not practicable and that the Navy's small take application for an LOA should be denied, for those reasons.

*Response:* Whether a project is viable or practical is not a criterion under the MMPA for determining whether to authorize marine mammal takings incidental to an activity. The authority for authorizing operations and deployment of the Navy SURTASS LFA resides with the Secretary of the Navy, not NMFS.

*Comment 2:* Many commenters were concerned regarding a conflict between the ANPR and the draft OEIS/EIS. The ANPR states that the 180 dB (i.e., 180 dB re 1 microPa(rms) RL (180 dB)) sound field is 2 km (1.1 nm) from the sound source. The draft OEIS/EIS states that the sound field is 1 km (0.54 nm) from the sound source. The commenters felt that if the ANPR was in error, it should be withdrawn and republished and the public comment period extended.

*Response:* The draft OEIS/EIS is correct; the ANPR was in error. A correction notice was published as quickly as possible once that error was detected. That notice was published on November 22, 1999 (64 FR 63783). Because the error did not affect the scope of the ANPR, and led only to speculation on the sound pressure level (SPL) of the SURTASS LFA sonar, and because NMFS is publishing in this document for public comment and review the same action as noticed in the ANPR, NMFS determined that no benefit would have been achieved by

reopening the public comment period on the ANPR.

*Comment 3:* One commenter notes that the Navy application is for all SURTASS LFA sonar operations, whereas the draft OEIS/EIS addressed only SURTASS LFA sonar operations for training and testing, not for actual military operation. If "hostile" operations are not included in the schedule of operations, then the actual take projections must be recalculated to account for such missions.

*Response:* The LOA application clearly states that the request is for the taking of marine mammals incidental to the employment of SURTASS LFA sonar during training, testing, and routine military operations. The authorization will not cover use of the system in armed conflict or direct combat support operations, nor during periods of heightened national threat conditions, as determined by the National Command Authorities. NMFS does not have a role in making these determinations. Therefore, takings during these situations would not be covered by the regulations or the LOAs. The recalculation of takings outside of the LOA in advance is neither necessary nor possible without knowing where the "hostile" activity will take place and how long that situation would last.

#### MMPA Concerns

*Comment 4:* Several commenters recommended that NMFS should extend the comment period to allow more time for review of the application.

*Response:* The ANPR is only the first of two public comment periods on NMFS' action. ANPRs are not required by the MMPA, but are utilized by NMFS to provide the public with early notification and to assist NMFS in the drafting of proposed regulations. The ANPR stated that, if NMFS proposes rulemaking (as we are doing here), as required by section 101(a)(5)(A)(ii) of the MMPA, NMFS will offer the public a second comment period. For this rulemaking, NMFS is providing a comment period of 45 days.

*Comment 5:* A commenter questioned why NMFS did not publish the ANPR until October 27, 1999, when the application was received from the Navy on August 12, 1999.

*Response:* NMFS published the ANPR as expeditiously as possible.

*Comment 6:* Several commenters wanted more time for review of the application and ANPR because of the detail of the draft OEIS/EIS.

*Response:* Because the application submitted by the U.S. Navy closely follows the information and data provided by the Navy in its draft OEIS/

EIS for SURTASS LFA sonar (which had a 90-day public comment period), and comments on that document were due 3 weeks prior to the close of the ANPR comment period, NMFS believes that little additional effort should be required by those members of the public interested in reviewing both documents in order to respond adequately to the U.S. Navy application for the small take authorization within the 30-day comment period.

*Comment 7:* NMFS should hold public hearings because the Navy application is unprecedented. Among other things, the application contemplates a world-wide scale for its activities, far exceeding the limits of what the small take exemption was meant to cover. It subjects marine mammals \* \* \* to levels of exposure well above anything NMFS has heretofore allowed for non-impulsive noise.

*Response:* The Navy held public outreach meetings on the draft OEIS/EIS in Washington, DC, Boston, MA, Miami, FL, Los Angeles, CA, Honolulu, HI, and Seattle, WA. In addition, public hearings on the draft OEIS/EIS were held by the U.S. Navy on September 29, 1999, in Norfolk, VA; on October 12, 1999, in San Diego, CA; and on October 14, 1999, in Honolulu, HI. NMFS attended these meetings. NMFS believes the opportunity to respond to this notice of proposed rulemaking provides the public with an adequate degree of participation in this process. However, if a petition is submitted to NMFS within 15 days of the date of publication of this document that it hold a public hearing, and that petition demonstrates that relevant information exists which can only be presented at a hearing (and cannot be presented in writing in response to this document), NMFS will hold a public hearing during the 45-day comment period on this document.

*Comment 8:* Under the MMPA, NMFS has an obligation to reject a proposal prior to rulemaking if the agency cannot make an affirmative finding that the project's impacts are "negligible."

*Response:* NMFS does not interpret the MMPA to require NMFS to reject an application submitted, under section 101(a)(5)(A) of the MMPA, prior to publishing proposed rulemaking, unless the applicant has not provided, as part of its application on the activity, sufficient documentation on those marine mammals affected, and the anticipated impact of the activity on marine mammals. Using the information provided by the Navy in its application and draft OEIS/EIS, NMFS believes that it has sufficient information to move forward and propose rulemaking. This

decision, however, does not preclude NMFS from requesting additional information from the Navy during the rulemaking process. However, a final rule will not be promulgated by NMFS unless the Agency makes a finding of negligible impact based on all relevant information acquired during the rulemaking process.

*Comment 9:* Commenters were of the opinion that SURTASS LFA sonar activities proposed by the Navy are not eligible for a "small take" exemption.

*Response:* For maritime activities conducted by U.S. citizens (other than commercial fishing, activities permitted under section 104 of the MMPA or activities otherwise exempted from the MMPA), there are two means to obtain an exemption to the MMPA's moratorium on taking marine mammals. The first is the small take exemption under section 101(a)(5) of the MMPA, and the second is a waiver of the moratorium under section 101(a)(3)(A) of the MMPA. If the Navy does not qualify for a small take authorization under section 101(a)(5)(A) of the MMPA, then the Navy would need to obtain a waiver under section 101(a)(3)(A) of the MMPA.

*Comment 10:* The scope of the activity contemplated by the Navy exceeds any reasonable interpretation of the statutory language for authorizing a small take exemption for a "specified geographic region."

*Response:* When Congress enacted the 1981 Amendments to the MMPA, which first authorized the Secretary to exempt specific activities from the MMPA's moratorium on takings without waiving the moratorium under section 101(a)(3), certain restrictions were placed on the circumstances under which the Secretary may issue an exemption. One of these requirements is that the activity must take place within "a specified geographic region." The Legislative history for this provision states: "It is the intention of the Committee that both the specified activity and the specified region referred to in section 101(a)(5) be narrowly identified so that the anticipated effects will be substantially similar." " \* \* \* [T]he specified geographical region should not be larger than is necessary to accomplish the specified activity, and should be drawn in such a way that the effects on marine mammals in the region are substantially the same. Thus, for example, it would be inappropriate to identify the entire Pacific coast of the North American Continent as a specified geographic region, but it may be appropriate to identify particular segments of that coast having similar characteristics, both biological and otherwise, as

specified geographic regions” (H. Rept 97–228, September 16, 1981, p 19).

NMFS believes that the regions described in this proposed rule are in keeping with Congress’ legislative intent in enacting this provision. Although SURTASS LFA sonar requires fairly large geographic regions because of the Navy’s need to deploy the system on a world-wide basis, these areas have been selected so as to retain similar biological characteristics within each region. As a result, NMFS believes that these areas are large enough to accomplish the specified activity without being so large that the effects on marine mammals will not be substantially the same.

It should be noted that the regions described in this proposed rule differ from those contained in the Navy’s original application and described in the ANPR. Based on a suggestion made by NMFS in the ANPR, the U.S. Navy revised its original proposal for 10 regions to one that proposes to adopt, with modification, the United Nation Food and Agriculture Organization’s (FAO) division of the world’s oceans into 16 distinct areas as shown in this document as Figure 1. (See FAO, 1971. *The Fish Resources of the Ocean*. Fishing News Books (Ltd). Surry England). These regions are described later in this document. Additionally, coastal areas and Arctic and Antarctic waters would be excluded from SURTASS LFA sonar operations. NMFS proposes to issue an LOA for each individual SURTASS LFA sonar system which will list the area(s) in which the deployment vessel plans to operate. As a result, NMFS believes the designated areas closely approximate the distribution of affected marine mammal species and will allow NMFS to implement appropriate mitigation and monitoring measures. One aspect of marine mammal distribution not taken into account by these areas is the shift in marine mammal distribution due to changes in oceanographic physiography. However, NMFS believes that it would be impractical to attempt to structure regulations specifying migratory corridors. While NMFS believes that little would be accomplished by further subdivision of the world’s oceans, it welcomes additional comments on this preliminary determination.

NMFS also disagrees with the commenters’ suggestion that the application should not be accepted because it is world-wide in scope and thus is more extensive than any activity previously authorized. Although no world-wide authorizations have previously been granted, NMFS does accept applications, and issue authorizations, for similar activities in

more than a single geographic region. For example, seismic surveys for oil and gas exploration may be conducted concurrently in the U.S. Beaufort Sea, southern California waters, and, in the Gulf of Mexico. Similar to SURTASS LFA sonar operations, each seismic survey employs a large vessel slowly towing a high-intensity, LF sound source. If warranted, small take authorizations should be available to these activities.

NMFS does not believe that Congress intended NMFS to issue separate regulations governing taking for each “specific geographic region,” as would be one alternative. While it would be possible for NMFS to do so, NMFS believes that these regulations would be redundant and unnecessary. As a result, the proposed incidental, small take regulations for SURTASS LFA sonar have been designed to be generic; LOAs issued under these regulations, would be tailored to the vessel’s specific geographic operating area and would include any appropriate prohibitions and mitigation or monitoring requirements.

*Comment 11:* One commenter wanted NMFS to acknowledge that the draft OEIS/EIS definitions for “non-serious injury” and “non-serious harassment” are unique and unsupported in the statutory context of the MMPA, or in definitions from NMFS.

*Response:* NMFS understands that the Navy’s draft OEIS/EIS definition caused confusion to reviewers. The Navy has modified these terms in the final OEIS/EIS. NMFS will continue to define takings by harassment as they are defined in section 3 of the MMPA (i.e., Level A and Level B harassment).

#### *Small Take Concerns*

*Comment 12:* Because the abundance of marine mammals within identified species and stocks that may be taken by SURTASS LFA sonar exceeds any reasonable interpretation of the MMPA’s “small numbers” provision, NMFS should reject the Navy’s application.

*Response:* The definition of the term “small numbers” at 50 CFR 216.103 differs from the commenters’ interpretation of “small numbers.” NMFS believes it was unfortunate that Congress was unable to provide more specific guidance on what it meant by the term “small.” The Legislative history for this provision (H. Rept 97–228, September 16, 1981) stated that the Committee recognized “the imprecision of the term . . . , but was unable to offer a more precise formulation because the concept is not capable of being expressed in absolute numerical limits” NMFS agrees with that Congressional

statement. NMFS believes that by defining “small numbers” to mean a portion of a marine mammal species or stock whose taking would have a negligible impact as in the definition of “small” found in § 216.103, an upper limit is placed on the term, and the phrase effectively implements the Congressional intent underlying the rule.

#### *Negligible Take Concerns*

*Comment 13:* The Navy’s draft OEIS/EIS ignored and/or did not adequately address the negative effects of LFA testing, including stranding of beaked whales in the Mediterranean, 3 abandoned cetacean calves in the Hawaii sonar test area, 80 percent of humpback whales stopping singing during tests, blue and fin whales decreasing vocalizations, and gray whales changing their migration route.

*Response:* The Navy has addressed these events in the Navy’s final OEIS/EIS. However, while NMFS recognizes that there is some potential for marine mammals to be affected by SURTASS LFA sonar signals (otherwise an incidental, small take authorization would not be needed), NMFS notes that: (1) detailed analyses of data from Phase I research indicated that there were no significant differences in vocal activity by blue and fin whales between those periods when SURTASS LFA sonar was not transmitting and when it was; (2) gray whale research was specifically designed to elicit an avoidance response, but was not conducted similar to SURTASS LFA sonar operations (in fact the research indicated that when SURTASS LFA sonar operated offshore, there was little or no avoidance response); and (3) the Navy acknowledges that while some singing humpback whales showed some apparent avoidance responses and cessation of song, an equal number showed no cessation of song. Also, there is no evidence linking SURTASS LFA sonar transmissions to any stranding event, and further the Navy’s proposed long-term monitoring (LTM) program will have a component to investigate any correlation between SURTASS LFA sonar transmissions and stranding events.

*Comment 14:* The Navy underestimates the extent and cumulative impacts of its deployment because it fails to consider operations undertaken for purposes of surveillance, deployments in direct support of combat, and deployments during periods of heightened threat conditions, as determined by the National Command Authorities.

*Response:* NMFS must make a determination that the total taking incidental to an applicant's specified activity, during the proposed 5-year period of authorization of the regulations, will have no more than a negligible impact on affected marine mammal populations. The application for the authorization specifically requests an authorization for employment of the SURTASS LFA sonar during training, testing, and routine military operations. It will not cover use of the system in other conflict situations mentioned by the commenter. Recognizing that certain mitigation, monitoring, and reporting requirements could not be met by the Navy in wartime situations, NMFS believes the approach taken by the Navy to be appropriate.

*Comment 15:* One commenter stated that, given that cetaceans are accepted as "people," it follows that NMFS, which treats them as stocks subject to sustainable "harvest" is promulgating the fiction that the cetaceans are to be treated in the same category as fish, when in fact, they are the oldest and most intelligent sentient creatures on Earth and fully worthy of our protection and respect.

*Response:* The MMPA prohibits the taking of marine mammals unless exempted or permitted. NMFS disagrees with the commenter that marine mammals are treated similar to fish. Fish are considered, among other things, a resource that may be harvested in a sustainable manner for consumption while the United States has affirmed that marine mammals should be protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management.

*Comment 16:* Several commenters criticized the Navy statement in the application that "research conducted to date is sufficient to assess impacts on marine mammals." Some recommended that on this basis, NMFS deny the Navy a small take permit. Another questioned how NMFS could make a negligible impact determination without having all relevant facts at its disposal.

*Response:* When the U.S. Navy first discussed whether an incidental, small take authorization was required for its SURTASS LFA sonar, NMFS determined that insufficient information existed to make a negligible impact determination. NMFS suggested the U.S. Navy conduct a scientific research program on marine mammals to determine potential effects of SURTASS LFA sonar on marine mammals. In making a finding as to whether an action will have a negligible impact on

marine mammals, NMFS is required to use the best scientific information available. This information should be available to applicants either publicly or through NMFS. However, Congress clarified in the Legislative history on this provision (H. Rept 97-228, September 16, 1981) that for situations where a negligible impact finding cannot be made (either because the proposed project or activity is hypothetical or the impact on the marine environment from the activity has not been investigated), the applicant would need to conduct research on the potential impacts of the proposed project or activity on marine mammals. For SURTASS LFA sonar, independent scientists focused their research efforts on 3 of the 4 species of marine mammals identified in a public workshop as most likely to be impacted by LF sound. Research conducted under an MMPA section 104 scientific research permit has been completed and the findings have been made available to the public. A preliminary determination on whether information is sufficient to make a determination that SURTASS LFA sonar is having no more than a negligible impact is a part of this rulemaking process.

#### *Marine Mammal Impact Concerns*

*Comment 17:* The LOA request excludes several species of marine mammals because their ranges purportedly do not overlap with the potential geographic operating regions of SURTASS LFA sonar.

*Response:* Preliminarily, the Navy and/or NMFS have determined that the following species should be added to the list of species that may potentially be affected. These species are the beluga whale (*Delphinapterus leucas*), the harbor porpoise (*Phocoena phocoena*), and the hooded seal (*Cystophora cristata*). Additional species may be added in the future based upon information obtained during the LTM Program or by other means. Adding species to the list, however, will require rulemaking to correct the list proposed in § 216.180(b). Until an amendment is made effective, the taking of marine mammal species not listed in § 216.180(b) remain prohibited. However, some species of marine mammals listed by one commenter, specifically bowhead whales, narwhals, and Arctic and Antarctic seals, while occupying the same geographic region as the SURTASS LFA sonar proposes to operate, are pagophilic (ice loving), and, therefore, would be unlikely to occupy the same region at the same time as SURTASS LFA sonar would be capable of operating in that region. Another

species mentioned by the same commenter, *Balaenoptera bonarensis*, is a small minke whale. Without more information on the species, for management purposes in this document, NMFS considers it a minke whale. Noting the typographical error in the Navy application, mixing the scientific and common names for sei whales and Bryde's whales, NMFS considers *B. edeni* and *B. brydeias* synonymous, as noted in Rice (1998).

Dugongs are not under the jurisdiction of NMFS. If the Navy believes that SURTASS LFA sonar may incidentally take dugongs by harassment, they should apply to the U.S. Fish and Wildlife Service for a small take authorization for this species. However, NMFS notes that the text referenced by the commenter (Jefferson et al., 1993) states that this species is found in the Indo-Pacific in coastal and inshore waters, areas where SURTASS LFA sonar will not operate.

*Comment 18:* Unless the 180 dB criteria is dramatically reduced (given proven impacts of sounds at far lower amplitudes), all species of excluded coastal cetaceans (the remaining species of porpoises as well as coastal "river" dolphins) will have to be included.

*Response:* The 180 dB criterion delineates an area around the source wherein scientists have determined that, at an SPL somewhere above that level, some marine mammal species may incur a permanent shift, or elevation, in hearing sensitivity (referred to as permanent threshold shift (PTS)). For that reason, NMFS encourages small take applicants, if possible, to design, establish and monitor an appropriate area around a loud noise source. Terminating sound transmissions whenever marine mammals enter a zone where their hearing may be affected, will prevent, to the greatest extent practicable, marine mammals from potentially incurring an impairment to hearing. For this proposed action, scientists have determined that a single-received level of 180 dB can be considered a scientifically precautionary level to prevent the potential onset of injury to a marine mammal. As a result, the Navy has proposed to establish a 180 dB safety zone for SURTASS LFA sonar operations, that would protect marine mammals that enter this area because the SURTASS LFA source transmissions would be terminated upon detection of the animal. The Navy calculates that this safety zone will encompass an area with a radius of approximately 1 km (0.54 nm). The Navy has stated that, as a mitigation measure, the 180 dB isopleth would remain at least 22 km

(12 nm) from all coastlines. Because sound normally attenuates more quickly on a shoaling bottom (that would be expected in coastal areas), than it does in the open ocean, the Navy does not expect marine mammals in coastal or riverine areas to be taken (by harassment) by SURTASS LFA sonar while the animals are in these areas.

*Comment 19:* Marine mammals may be killed incidental to SURTASS LFA sonar operations due to stranding, and due to increased risk to predation and starvation through masking.

*Response:* The potential for masking and increased predation have been discussed in the Navy application and the draft OEIS/EIS. Please refer to those documents for additional information. While masking could possibly occur for those species of marine mammals that use the same frequency as SURTASS LFA sonar, masking would be minor and temporary (i.e., 80–90 percent of the time a whale would be able to perceive predator or prey through LF sounds), because the SURTASS LFA sonar bandwidth is very limited (approx. 30 Hz), signals do not remain at a single frequency for more than 10 seconds, and the system is off at least 80 percent of the time.

Because of the offshore nature of SURTASS LFA sonar operations, the Navy does not believe that there is a potential for SURTASS LFA sonar to result in marine mammal stranding incidents. Under the Navy's LTM program however, the Navy plans to coordinate with principal world-wide marine mammal stranding networks and report any correlations between SURTASS LFA sonar operations and stranding events to NMFS. However, because the Navy has not requested an incidental take by mortality (as in a stranding event), an LOA, if issued, would not authorize this form of taking. Under regulations found at § 216.106(e), an LOA may be modified, suspended or revoked if a marine mammal is taken by a method that is not authorized.

*Comment 20:* Commenters noted that the Navy has deflated its assessment of serious injury (to marine mammals) to near zero with an untested monitoring program. Another commenter believes that the draft OEIS/EIS assumes 100-percent detection within the safety zone. This commenter believes it is unacceptable (for marine mammals to incur an SPL greater than 180 dB) and could even be fatal.

*Response:* The Navy has assessed the efficiency of its tripartite monitoring system (discussed later in this document) at approximately 80 percent (70-percent high-frequency marine mammal monitoring (HFM3) sonar and

5 percent each for visual and passive acoustic monitoring). Based upon that level of efficiency, the Navy has indicated that incidental harassment takes would be as indicated in Tables 4–12 and 4–13 of its application. NMFS recognizes that the Navy should provide supporting evidence of the efficiency of the HFM3 sonar based on documentation of its effectiveness or field testing results. As a result, until such time as the Navy provides verifiable test results on the HFM3 sonar, NMFS will need to base its determination of negligible impact solely on the effectiveness of geographic mitigation.

However, NMFS does not agree that the proposed incidental takings would result in more than minimal levels of serious injury. Because serious injury is unlikely to occur unless a marine mammal is well within the 180 dB SURTASS LFA sonar safety zone and close to the source, and because the closer the mammal is to the vessel, the more likely it will be detected, and the SURTASS LFA sonar operation suspended, the potential for serious injury to occur is minimal.

For mitigation effectiveness for harassment and non-serious injury, NMFS recommends reviewers study the last column of Table 4–10 of the application (Table 4.2–10 of the OEIS/EIS). The last column lists the reduction of potential for effects on marine mammals.

#### *Long-Term and Cumulative Effects Concerns*

*Comment 21:* We know almost nothing about the long term effects of LFA sonars on marine life, and the Navy fails to consider the full range of cumulative effects that SURTASS LFA sonar would have together with other noise sources. The Navy has also neglected to measure the foreseeable effects of proliferation once this technology is deployed. All this must be considered by NMFS. Another commenter believes the scenario of more than two vessels being at sea in the same sea simultaneously conducting exercises has not been given full consideration.

*Response:* NMFS believes that the issue of cumulative impact of increasing use of LFA sonar technologies by non-U.S. nations and other LF sources is a subject for the Navy to address under NEPA. However, under section 101(a)(5)(A) of the MMPA, NMFS is required only to make a determination that the total of the incidental taking of marine mammals by the specified activity being authorized during the 5-year period concerned will have no

more than a negligible impact on such species or stock of marine mammal. In this case, NMFS must assess the potential impacts on marine mammals from no more than four SURTASS LFA vessels transmitting 432 hrs/vessel/yr.

In its application, the Navy states that there is a remote possibility that two sources may be operating in the same geographic area at the same time. NMFS intends to base its negligible impact assessment on that scenario. If LOAs are issued, the use of more than two SURTASS LFA sonar sources operating at the same time within the same specific geographic area would be considered a violation of the LOA.

#### *Mitigation Concerns*

*Comment 22:* If NMFS moves forward with rulemaking, it is obligated under the MMPA to prescribe methods and means of effecting the least practicable adverse impact.

*Response:* NMFS agrees that measures to mitigate the impact to the lowest level practicable is a requirement of the MMPA. However, NMFS cannot require compliance with impractical methods and means. Specific mitigation measures are discussed in the following 9 comments and responses.

*Comment 23:* Several commenters questioned the use of a 180 dB criterion for suspension of transmissions, since far lower SPLs have been demonstrated to cause clear short-term behavioral impacts on cetaceans. If an LOA is issued, a much lower level of exposure for protected species should be required.

*Response:* As mentioned previously, based on information provided at two public workshops (HESS Workshop, June 12-13, 1997, NMFS Acoustic Criteria Workshop, September, 1998), in general, 180 dB is the level above which scientists caution a PTS injury has the potential to occur in marine mammals. The distance from the SURTASS LFA sonar source to the 180 dB isopleth is approximately 1 km (0.54 nm). Thus, the 180 dB SURTASS LFA sonar mitigation zone is the proposed safety zone that will prevent, to the greatest extent practicable, both PTS and temporary hearing impairment (termed temporary threshold shift (TTS)) to marine mammals.

While the commenter is correct that behavioral modifications can be expected at lower SPLs, the proposed monitoring (visual, passive acoustic and active acoustic), is not likely to be as effective at the greater distances where these impacts are likely to occur. As a result, NMFS prefers to require the Navy to concentrate monitoring in an area wherein marine mammals are more

likely to incur an injury, than at distances wherein the incidental taking will be limited to short-term behavioral modifications. Since monitoring is less likely to be effective at distances much greater than the 180-dB isopleth, and because the Navy has requested a small take authorization for the incidental harassment of marine mammals, NMFS has preliminarily determined that the establishment of a safety zone at the 180 dB isopleth is the distance that is most practicable for reducing potential impacts on marine mammals to the lowest level.

*Comment 24:* One commenter recommended that, if an LOA is issued, no transmissions at night or in sea conditions greater than Beaufort 4 be allowed, to maximize the probability of detecting protected species.

*Response:* NMFS concurs with the U.S. Navy that in order for training to be effective it must simulate, to the greatest extent practicable, conditions that would be expected during periods of heightened readiness. Hostile situations do not diminish with sunset or high sea states. As a result of poor nighttime and high sea state visibility for detecting marine mammals, the Navy will use the HFM3 sonar and passive sonar to improve marine mammal detection.

*Comment 25:* Commenters recommended additional mitigation measures, such as geographical restrictions above and beyond those proposed by the Navy, including an extension of the coastal exclusion zone beyond the limits of the U.S. territorial sea and the territorial seas of other countries, expansion of the Southern Ocean whale sanctuary, the addition of the Indian Ocean whale sanctuary, and the addition of biologically significant offshore areas; and a timely, transparent, and publicly accountable procedure for supplementing the initial list of restrictions.

*Response:* In this proposed rule, NMFS is proposing to establish a system for government agencies, non-government organizations, and the public to be able to propose areas for NMFS to consider adding to the list of offshore biologically important areas (OBIA) for marine mammals. NMFS emphasizes that, in order for designation, an area must be of particular importance for marine mammals as an area for primary feeding, breeding, or migration, and not simply an area occupied by marine mammals. The proposed area should not be within a previously designated exclusion area nor rationalized simply because of previous designations for geopolitical reasons.

In order for NMFS to begin the rulemaking process for designating areas of biological importance for marine mammals, proponents must petition NMFS and submit the information described in § 216.191(a). If NMFS makes a preliminary determination that the petitioners have provided sufficient information that the area is of significant biological importance for marine mammals, NMFS will propose rulemaking to add the recommended area to the list of previously designated areas. Through notice in the **Federal Register**, NMFS will invite information, suggestions, and comments on the proposal for a period of time not less than 45 days from the date of publication in the **Federal Register**. After review of the comments, and relevant data and information, NMFS will make a final decision on whether to add the recommended area to the list found in § 216.183(d). NMFS will either issue a final rulemaking on the proposal or provide notice in the **Federal Register** on its determination. It should be understood, however, that proposals for designation of areas would not affect the status of LOAs while the rulemaking is in process. NMFS anticipates that the time between nominating an area and publication of a final determination is likely to take 8-12 months. However, in order to provide proper notice and comment to interested parties, NMFS will not accept recommendations for additional OBIA until after the present rulemaking has been completed.

To extend the list of restrictions (referred to in this document as mitigation measures), found in § 216.184, an individual or organization would need to petition NMFS under the Administrative Procedure Act (APA) to add additional mitigation measures. Petitions would need to provide sufficient information for NMFS to determine that new rulemaking is warranted and practical.

*Comment 26:* One commenter noted that only 2 examples of offshore OBIA are presented in the draft OEIS/EIS. Have other OBIA been designated? If not, it seems that such designations would be required before the public and government agencies would be able to appropriately review the potential impacts of this action on offshore species. Another commenter was of the opinion that we do not have sufficient knowledge about OBIA to state where these might be in the ocean.

*Response:* In a recent letter to NMFS, the Navy added the Costa Rica Dome in the eastern Pacific Ocean to the list of OBIA and expanded the Antarctic Convergence Zone OBIA. Also, NMFS, at the request of NOAA's National

Ocean Service, has proposed to add Penguin Bank, off the Island of Kauai, Hawaii, inside the NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS). These additions are reflected in the rulemaking at the conclusion of this document. However, NMFS does not agree that more designations are necessary before it can review the Navy small take application. As mentioned in response to the previous comment, a system has been proposed by NMFS to afford the public an opportunity to propose new OBIA. As knowledge about offshore areas increases over the next few years, new areas can be nominated if they are determined to provide a critical need for marine mammals. It should be noted that determinations regarding the impact of the proposed activities will be based on operation of SURTASS LFA sonar without any OBIA that might be proposed in the future.

*Comment 27:* NMFS should ensure that the coastal exclusion zone applies to islands as well as continents, regardless of size, as these waters contain some of the rarest and bio-rich marine habitat in the world.

*Response:* The Navy proposes to restrict the 180 dB isopleth from the SURTASS LFA sonar to outside 12 nm (22 km) of any coastline in the world. This would include coastlines of offshore islands, such as Hawaii.

*Comment 28:* One commenter recommended NMFS impose a condition, if the authorization is granted, limiting received sound levels to 150 dB or less in Hawaii State waters and in additional areas in the HIHWNMS lying outside of state waters.

*Response:* The Navy believes that, by imposing a mitigation measure of an SPL no greater than 180 dB for SURTASS LFA sonar at 12 nm (22 km) of any coastline in the world, SPLs greater than 150 dB (from the SURTASS LFA sonar) should not occur within Hawaiian State waters. If a state or other organizations can provide documentation that state waters need additional protection, they can provide the documentation and petition NMFS proposing such restrictions as a mitigation measure, as described in response to previous comments. NMFS notes, however, that there are numerous other sources of anthropogenic noise within coastal waters that far exceed 150 dB for which states have not required similar restrictions.

Similarly, if more protection is needed for the marine mammals inhabiting the HIHWNMS than would be provided by making Penguin Bank an OBIA, interested parties can petition

NMFS to either impose additional mitigation measures to protect a National Marine Sanctuary's marine mammal resources, or to establish that portion of the HIHWNMS (or any other National Marine Sanctuary) that extends beyond 12 nm (22 km) of the coast as an OBIA.

*Comment 29:* One commenter recommended mitigation measures include reductions in source level, duty cycle, and annual transmission hours, none of which, the commenter believes, has as yet been operationally justified as having the least practicable adverse impact on marine mammals.

*Response:* As stated previously, NMFS does not authorize the activity and does not have the expertise to determine what source levels, transmission hours or duty cycles would be appropriate for SURTASS LFA sonar mitigation without affecting the efficiency of the system. Similar concerns have been provided to the Navy as comments to the draft OEIS/EIS and have been addressed in the final OEIS/EIS. NMFS will review the final OEIS/EIS for the Navy's response to these suggestions prior to making a final determination on whether the incidental harassment takings by SURTASS LFA sonar is at the lowest level practicable.

*Comment 30:* One commenter recommended the use of ramp-up procedures to protect marine mammals.

*Response:* The Navy proposed in its application to employ a 5-minute ramp-up during the HFM3 sonar transmissions. Since the HFM3 sonar will be operating for a minimum of 30 minutes prior to initiation of SURTASS LFA sonar, ramp-up of the SURTASS LFA sonar is not necessary.

*Comment 31:* One commenter recommended that mitigation measures include replacement of LFA to the extent practicable with new passive acoustic technologies, such as the Advanced Deployable System (ADS) which is currently being tested off the California coast.

*Response:* The ADS is not a mitigation measure for SURTASS LFA but is an entirely different system that is not under consideration for takings under this proposed rulemaking. The Navy has addressed other acoustic technologies in greater detail in the final OEIS/EIS. NMFS must state again that it does not authorize the activity, only the taking of marine mammals incidental to the activity. For SURTASS LFA sonar, that activity is authorized by the Secretary of the Navy. It is for the Navy to decide, through its decision-making process, one step of which is the NEPA process, whether to deploy the SURTASS LFA sonar system.

#### *Monitoring and Reporting Concerns*

*Comment 32:* Passive acoustic monitoring to detect marine mammals is questionable. Will only audible frequencies be monitored, and if so, how will species which vocalize above our hearing range be detected? To evaluate the validity of acoustic monitoring for cetaceans, the proportion of the time each species vocalizes . . . will need to be determined. There are some species of cetaceans (particularly beaked whales) for which nothing is known about the frequency range produced by vocalizing animals.

*Response:* NMFS believes these comments developed because there was insufficient information on passive acoustic monitoring in the draft OEIS/EIS. Passive acoustic monitoring will be accomplished using the SURTASS LFA sonar horizontal towed array whose detection capabilities are in the same general frequency range as that of the transmit array (i.e., below 500 Hz). As a result, it will not detect vocalizations from all marine mammal species, and is the reason why the Navy only considers this monitoring method at 5 percent efficiency. The Navy anticipates that the passive acoustic monitoring program will be used simply to cue the HFM3 sonar to the presence of vocalizing mammals. It should be understood that an operator need not be able to distinguish species by vocalizations here, only that they be capable of distinguishing between these sounds and those of other underwater sounds. Highly trained Navy sonar technicians are very proficient at distinguishing between the two sounds. NMFS believes, moreover, that the LTM program will provide needed data on the adequacy of the monitoring methodology over the first few years of operation.

*Comment 33:* Research and development of passive acoustic and other technologies for monitoring marine mammals within a wide radius of the source; and verification of Navy's as-yet unproven and potentially harmful HFM3 system, should be accomplished before operations begin. One commenter questioned whether the HFM3 sonar should have an OEIS/EIS of its own (i.e., be subject to NEPA).

*Response:* First, NMFS questions the commenter's statement that the HFM3 sonar is potentially harmful. Table 4-11 of the application compares the HFM3 sonar with other standard "fish finding" sonars. Due solely to a 10-20 kHz lower frequency and lower reverberation, the HFM3 has an increased range for detecting marine mammals and other sea life. At this time, NMFS has no

evidence that "fish-finding" sonars are harmful to marine mammals. Because the HFM3 sonar is fully discussed in the draft OEIS/EIS, NMFS does not believe that the Navy's use of fish-finding-type sonars, like the HFM3, are subject to NEPA, separate from the draft (and final) OEIS/EIS.

Second, NMFS has stated previously in this document that, until the Navy provides documentation supporting its claim that the HFM3 is 70 percent effective, NMFS plans to calculate incidental take levels using just the geographic mitigation. The Navy has the option to provide additional information on the effectiveness of the HFM3 sonar during this rulemaking that NMFS may use during its final determination on this action.

NMFS does not believe the MMPA requires a delay in the issuance of an authorization until mitigation or alternative technology proves effective (as long as a negligible impact determination can be made), only that the taking be reduced to the lowest level practicable. However, NMFS encourages the Navy and others to undertake research into more effective passive acoustics.

*Comment 34:* Given the long dive times of many species of marine mammals, 30 minutes of monitoring prior to start up is inappropriate. The commenter recommends 1-2 hours prior to starting up the SURTASS LFA.

*Response:* NMFS does not believe that a time period greater than 30 minutes should be required for visual, passive and active acoustic monitoring considering the relatively small area of the SURTASS LFA sonar safety zone, and because, unlike many other activities which (in order to mitigate marine mammal takings) employ only visual monitoring, SURTASS LFA sonar operations will also employ acoustic systems to locate marine mammals within this safety zone. Therefore, NMFS proposes here to make a condition of the LOA that visual monitoring must start no less than 30 minutes prior to starting SURTASS LFA sonar transmissions, whenever visibility allows such monitoring.

*Comment 35:* Monitoring should include post-transmission monitoring. This would allow for the detection of changes in behavior subsequent to transmission.

*Response:* NMFS agrees and is proposing that the LOA contain a condition requiring the Navy to conduct visual and passive acoustic monitoring for a period of time no less than 15 minutes after the last SURTASS LFA sonar transmission of the sequence

(monitoring will also continue between "pings").

*Comment 36:* Will NMFS demand that the LTM program data be readily available to scientists not associated with the LFA or the Office of Naval Research?

*Response:* Reports will be provided by the Navy annually to NMFS under § 216.186. These documents will contain LTM data and will be available to the public for review.

*Comment 37:* One commenter recommended establishment of an extramural, independent board of scientists, policymakers, environmental advocates, and citizen representatives to review monitoring data and relevant research and to make recommendations to NMFS, as well as the Navy, for reducing the system's impacts.

*Response:* NMFS does not believe that a formal board is necessary for reviewing monitoring and research reports, and applications for annual LOAs. Because such a board would probably come under the Federal Advisory Council Act (FACA) and the requirements under FACA, NMFS recommends that interested individuals meet as a non-governmental organization and remain independent from the Federal Government. Members of this board could independently or jointly comment to NMFS, based on annual reports, or petition NMFS under the APA to amend regulations based on their interpretation of the reports.

#### Research Concerns

*Comment 38:* One commenter recommended the establishment of a clear timetable for additional research, especially of SURTASS LFA's long term impacts; and a secure budget for research over the expected life of the program.

*Response:* NMFS cannot require the Navy to undertake a particular level and type of research, outside the purview of this proposed Authorization. NMFS can however, and does, strongly encourage the Navy to undertake research to determine impacts on species of marine mammals that may potentially be affected by LF sounds. NMFS notes that its preliminary negligible impact determination is based on research conducted by independent scientists, funded by the U.S. Navy, on 3 species of balaenopterid whales, that were determined most likely to be affected by SURTASS LFA sonar noise. The Navy has provided information in the final OEIS/EIS on the potential effects of SURTASS LFA sonar on additional species, including, to the extent practicable, sperm whales, beaked whales, other odontocetes and

pinnipeds. NMFS expects the Navy will provide NMFS with a detailed plan for research.

#### LOA Concerns

*Comment 39:* One commenter questioned whether NMFS' proposal to issue an LOA to each vessel as it becomes operational would mean that each LOA for each ship will consist of a 5-year permit for the taking of marine mammals, making the effective permit for LFA operations a total of 10 years if the last vessel becomes operational in FY 2004. This is not acceptable and the ANPR should be withdrawn as it was not analyzed as such in the draft OEIS/EIS. Another commenter considers it inappropriate for the Navy to request a 5-year authorization for up to 4 vessels, in part because procurement and development schedules are not sufficiently guaranteed. This commenter recommended issuing LOAs for each vessel just prior to operational status.

*Response:* These regulations are proposed to be effective for a period of 5 years, from the date of issuance. An LOA cannot be issued until the regulations are effective and cannot exist beyond the expiration date of the regulations. Under the proposed regulations, LOAs would be issued for 1 year and would be renewed annually. An LOA would be issued for each SURTASS LFA sonar system, once that system becomes operational and is deployed on a vessel.

*Comment 40:* One commenter recommended use of an annual system of reporting and reauthorization that requires the Navy to specify, pursuant to the MMPA, each geographical region to be affected by its intended operations.

*Response:* NMFS concurs and has established a system for an annual submission of a list of geographic areas for operations and for reporting annually on their activity.

*Comment 41:* One commenter recommended that each LOA must specify a maximum number of takes by species, population and region for each vessel, establish a monitoring system to warn of impending maximums, and include restrictions on the further use of LFA for any purpose if the maximum take is reached.

*Response:* Establishing and enforcing quotas under an LOA is practical only when timely reporting of incidental takings can be accomplished, when NMFS can conduct an analysis of the data within the period of validity of an LOA, and when the affected marine mammal stocks would be disadvantaged by exceeding a certain level. In the case of SURTASS LFA sonar, the Navy has stated that the data from the LTM

program cannot be available in real-time because of post-mission analysis requirements including declassification of sensitive national security information. In its application, the Navy has proposed that this information be provided to NMFS annually. NMFS intends to review this information (in addition to other information) to ensure that the determinations made during this rulemaking (i.e., that the taking is small and having no more than a negligible impact on affected species and stocks of marine mammals) are appropriate.

In addition, as noted in the application, incidental take levels are estimated as a percentage of the population, and not as individual numbers of animals, and the monitoring proposed by the Navy is to ensure that Level A harassment is reduced to the lowest level practicable. As a result, as presently designed, NMFS does not consider it practical to establish, and enforce, a quota system.

#### ESA Concerns

*Comment 42:* Commenters were concerned that the Navy did not also request that threatened and endangered marine turtle species, and endangered fish species be included under the MMPA authorization.

*Response:* Other than marine mammals, threatened and endangered species of marine life are not protected under the MMPA; however, they are provided protection under the ESA. Under section 7 of the ESA, the U.S. Navy requested initiation of formal consultation with NMFS on October 4, 1999. This consultation will be concluded prior to a determination on issuance of a final rule and any MMPA authorization. If appropriate, NMFS will authorize takings of marine species listed as threatened or endangered under the ESA incidental to SURTASS LFA sonar to the Navy through an Incidental Take Statement issued under section 7 of the ESA.

#### NEPA Concerns

*Comment 43:* The U.S. Navy has submitted an application for an incidental take of marine mammals, and NMFS has accepted that application, prior to close of the comment period of the draft OEIS/EIS under NEPA. Processing the Navy application should be delayed until after the Navy has completed its NEPA responsibilities.

*Response:* NMFS does not believe that delaying the incidental small take authorization process until completion of NEPA documentation would be appropriate. Both the Council on Environmental Quality (CEQ)

regulations (40 CFR 1502.5(d)) and NOAA's NEPA guidelines provide for proposed regulations to accompany a draft NEPA document. As a cooperating agency in the preparation of the OEIS/EIS, which NMFS may adopt as its own NEPA document, the Navy draft OEIS/EIS is the key NEPA document for the NMFS action. Not beginning the small take authorization/regulatory process until completion of NEPA requirements would lead to unnecessary and potentially extensive delays in processing applications, a key problem previously recognized by Congress in 1994, when it amended the MMPA to expedite authorizations under the small take program. Under NEPA, NMFS may not make final regulations governing the taking of marine mammals effective for at least 30 days after an action agency releases a Final EIS on the action. However, because publication of this rulemaking document was delayed for several months, the Navy's final OEIS/EIS was released prior to release of this rulemaking.

*Comment 44:* What exactly constitutes NMFS being a cooperating agency on a project where NMFS is legally mandated to play a regulatory role?

*Response:* CEQ regulations (40 CFR 1501.6) stipulate that any Federal agency having either jurisdiction by law, or expertise on subject matter that should be addressed in the draft EIS, may be a cooperating agency whenever requested. For the Navy's draft OEIS/EIS for SURTASS LFA sonar, NMFS, as a Federal agency, meets both those criteria. For this action NMFS' role under NEPA is explained in the letter to the Navy on April 1, 1998 (see Appendix A, draft OEIS/EIS) and was limited to review and comment on the draft OEIS/EIS during its preparation. In addition, because the regulations contained in this notice also constitute a federal action, NMFS also has a NEPA responsibility. NMFS anticipates that this responsibility will be satisfied by adopting the Navy's final OEIS/EIS, in whole or in part, as its own NEPA document when making the final decision on the issuance of the small take authorization, in accordance with 40 CFR 1506.3.

*Comment 45:* There appears to be a conflict of interest when the same person listed in **FOR FURTHER INFORMATION CONTACT** is also listed as a preparer of the draft OEIS/EIS.

*Response:* NMFS disagrees, noting that as a Federal agency, NMFS has NEPA responsibilities for the proposed issuance of a small take authorization to the U.S. Navy. Knowing that the Navy's SURTASS LFA sonar had the potential to take marine mammals incidental to it

operation, and, that there was consideration being given at the time that an incidental, small take application would be submitted by the U.S. Navy, NMFS, on April 1, 1998, agreed to be a cooperating agency, as defined by the CEQ regulations (40 CFR 1501.6), on the preparation of the U.S. Navy draft OEIS/EIS on SURTASS LFA sonar. NMFS provided guidance to the U.S. Navy on the OEIS/EIS preparation so that the document could satisfy both agency's NEPA responsibilities. Whether it has done so will be determined upon NMFS' review of the final OEIS/EIS.

*Comment 46:* Several commenters concluded that it would be irresponsible for NMFS to issue regulations and authorizations based on the insufficiency, and unsubstantiated claims in the draft OEIS/EIS.

*Response:* NMFS must make its determinations under section 101(a)(5)(A) of the MMPA based on the best scientific information available. At this time, most, if not all, of that information is contained in the draft (and final) OEIS/EIS. NMFS expects that necessary corrections that were brought to the Navy's attention during the comment period on the draft OEIS/EIS will be addressed and, if necessary, updated in the final OEIS/EIS. NMFS will not promulgate final regulations nor make any determinations under section 101(a)(5)(A) of the MMPA until the Navy and NMFS have both met their NEPA responsibilities.

#### *Other Concerns*

*Comment 47:* On what basis does NMFS state that this proposed action is not significant for purposes of Executive Order (E.O.) 12866? The draft OEIS/EIS does not refer to any costs whatsoever, yet the Navy has been reported as having spent from \$350 million to \$1.45 billion on SURTASS LFA sonar to date. Until the true costs of the entire program are stated, and a cost-benefit analysis conducted per E.O. 12866, the ANPR should be withdrawn.

*Response:* E.O. 12866, "Regulatory Planning and Review," among other things, requires a Federal agency to determine whether a regulation it is proposing is significant. This regulation has been determined to be significant. For a regulation to require a cost-benefit analysis, the regulation (not the activity itself) must have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities. Since NMFS is

promulgating regulations regarding the incidental taking of marine mammals, and these regulations materially affect only the U.S. Navy, NMFS has determined that these regulations do not have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities. NMFS has determined that these regulations do not require a full cost-benefit analysis (see Classification).

#### **Affected Marine Mammal Species**

In the Navy draft OEIS/EIS analysis and small take application, the Navy excluded from take consideration those marine mammal species that either do not inhabit the areas wherein SURTASS LFA sonar would operate or do not possess sensory mechanisms that allow the mammal to perceive LF sounds. Where data were not available or were insufficient for one species, comparable data for a related species were used, if available. Because all species of baleen whales produce LF sounds, and anatomical evidence strongly suggests that their inner ears are well adapted for LF hearing, all balaenopterid species are considered sensitive to LF sound and at risk from exposure to LF sounds. The ten species of baleen whales that may be affected by SURTASS LFA sonar are blue (*Balaenoptera musculus*), fin (*Balaenoptera physalus*), minke (*Balaenoptera acutorostrata*), Bryde's (*Balaenoptera edeni*), sei (*Balaenoptera borealis*), humpback (*Megaptera novaeangliae*), northern right (*Eubalaena glacialis*), southern right (*Eubalaena australis*), pygmy right (*Caperea marginata*), and gray (*Eschrichtius robustus*) whales.

The odontocetes (toothed whales) that may be affected because they inhabit the deeper, offshore waters where SURTASS LFA sonar might operate include both the pelagic (oceanic) whales and dolphins and those coastal species that also occur in deep water including harbor porpoise, beluga, *Stenella spp.*, Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), Fraser's dolphin (*Lagenodelphis hosei*), right-whale dolphin (*Lissodelphis spp.*), *Lagenorhynchus spp.*, *Cephalorhynchus spp.*, bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), Dall's porpoise (*Phocoenoides dalli*), melon-headed whale (*Peponocephala spp.*), beaked whales (*Berardius spp.*, *Hyperoodon spp.*, *Mesoplodon spp.*, Cuvier's beaked whale (*Ziphius cavirostris*), Sheppard's

beaked whale (*Tasmacetus shepherdi*), Longman's beaked whale (*Indopacetus pacificus*), killer whale (*Orcinus orca*), false killer whale (*Pseudorca crassidens*), pygmy killer whale (*Feresa attenuata*), sperm whale (*Physeter macrocephalus*), dwarf and pygmy sperm whales (*Kogia simus* and *K. breviceps*), and short-finned and long-finned pilot whales (*Globicephala macrorhynchus* and *G. melas*).

Potentially affected pinnipeds include hooded seals, harbor seals (*Phoca vitulina*), spotted seal (*P. largha*), ribbon seal (*P. fasciata*), gray seal (*Halichoerus grypus*), elephant seals (*Mirounga angustirostris* and *M. leonina*), Hawaiian monk seals (*Monachus schauinslandi*), Mediterranean monk seals (*Monachus monachus*), northern fur seals (*Callorhinus ursinus*); southern fur seals (*Arctocephalus spp.*), Steller sea lion (*Eumetopias jubatus*), California sea lions (*Zalophus californianus*), Australian sea lions (*Neophoca cinerea*), New Zealand sea lions (*Phocarctos hookeri*), and South American sea lions (*Otaria flavescens*).

A description of affected marine mammal species, their biology, and the criteria used to determine those species that have the potential for taking by harassment are provided and explained in detail in the Navy application and draft OEIS/EIS and, although not repeated here, are considered part of the record of decision on this matter.

### Impacts to Marine Mammals

The effects of underwater noise on marine mammals are highly variable, and can be categorized as follows (based on Richardson *et al.*, 1995): (1) The noise may be too weak to be heard at the location of the animal (i.e. lower than the prevailing ambient noise level, the hearing threshold of the animal at relevant frequencies, or both); (2) the noise may be audible but not strong enough to elicit any overt behavioral response; (3) the noise may elicit behavioral reactions of variable conspicuousness and variable relevance to the well being of the animal; these can range from subtle effects on respiration or other behaviors (detectable only by statistical analysis) to active avoidance reactions; (4) upon repeated exposure, animals may exhibit diminishing responsiveness (habituation), or disturbance effects may persist (the latter is most likely with sounds that are highly variable in characteristics, unpredictable in occurrence, and associated with situations that the animal perceives as a threat); (5) any human-made noise that is strong enough to be heard has the potential to reduce (mask) the ability of

marine mammals to hear natural sounds at similar frequencies, including calls from conspecifics, echolocation sounds of odontocetes, and environmental sounds such as surf noise; and (6) very strong sounds have the potential to cause temporary or permanent reduction in hearing sensitivity.

The analysis of potential impacts on marine mammals from SURTASS LFA sonar was developed by the Navy based on the results of a literature review, the Navy's LF Sound Scientific Research Program (LFS SRP), and a complex, comprehensive program of underwater acoustical modeling. To assess the potential impact on marine mammals by the SURTASS LFA sonar source operating at a given site, it was necessary for the Navy to predict the sound field that a given marine mammal species could be exposed to over time. This is a multi-part process involving (1) the ability to measure or estimate an animal's location in space and time, (2) the ability to measure or estimate the three-dimensional sound field at these times and locations, (3) the integration of these two data sets to estimate the total acoustic exposure for each animal in the modeled population, (4) converting the resultant cumulative exposures for a modeled population into an estimate of the risk from a significant disturbance of a biologically important behavior, and (5) converting these estimates of behavioral risk into an assessment of risk in terms of the level of potential biological removal.

Next, as discussed later in this document, a relationship for converting the resultant cumulative exposures for a modeled population into an estimate of the risk to the entire population of a significant disruption of a biologically important behavior and of injury was developed. This process assessed risk in relation to received level (RL) and repeated exposure. The resultant "risk continuum" is based on the assumption that the threshold of risk is variable and occurs over a range of conditions rather than at a single threshold.

Taken together, the LFS SRP results, the acoustical modeling, and the risk assessment, provide an estimate of potential environmental impacts to marine mammals.

The acoustical modeling process was accomplished using the Navy's standard acoustical performance prediction transmission loss model-Parabolic Equation (PE) version 3.4. The results of this model are the primary input to the Acoustic Integration Model (AIM). AIM was used to estimate marine mammal sound exposures and essentially integrates simulated movements (including dive patterns) of marine

mammals, a schedule of SURTASS LFA sonar transmissions, and the predicted sound field for each transmission to estimate acoustic exposure during a hypothetical SURTASS LFA sonar operation. Description of the PE and AIM models, including AIM input parameters for animal movement, diving behavior, and marine mammal distribution, abundance, and density are described in detail in the Navy application and the draft OEIS/EIS and are not discussed further in this document. NMFS recommends reviewers read these documents if additional information is desired.

Using the AIM model, the Navy developed 31 acoustic modeling scenarios for the major ocean regions (which are described in the application and draft OEIS/EIS). Locations were carefully selected by the Navy to represent the highest potential effects for each of the three major ocean acoustic regimes where SURTASS LFA sonar would be employed. These acoustic regimes were: (1) Deep-water convergence propagation zone, (2) near surface duct propagation zone, and (3) shallow water bottom interaction propagation zone. These scenarios represent the condition under which, on average, the greatest number of animals could be exposed to the greatest number of pings at the highest RLs and were considered the most severe conditions that could be expected from operation of the SURTASS LFA sonar system. Thus, if SURTASS LFA sonar operations were conducted in an area that was not acoustically modeled, the Navy believes the potential effects would most likely be less than those obtained from the most similar scenario in the analysis. The modeled scenarios were then used by the Navy to estimate the percentages of marine mammal stocks potentially affected.

### Risk Analysis

In order to determine the potential impacts that exposure to LF sound from SURTASS LFA sonar operations could have on marine mammals, biological risk standards were defined by the Navy with associated measurement parameters. Based on the MMPA, the potential for biological risk was defined as the probability for injury or behavioral harassment of marine mammals. In this analysis, behavioral harassment is defined as a significant disturbance of a biologically important behavior. The potential for biological risk is a function of an animal's exposure to a sound that would potentially cause hearing, behavioral, psychological or physiological effects. The measurement parameters for

determining exposure were RLs in dB, the length of the signal (ping), and the number of pings received.

The Navy interprets the results of the LFS SRP to justify use of unlimited exposure during a mission to 120 dB as the lowest value for risk. Below this level, the risk of a biologically significant response from marine mammals approaches zero. It is important to note that risk varies with both level and number of exposures.

In the draft OEIS/EIS and small take application, the Navy calculated the risks for take by non-serious injury based on criteria of 180 dB, which, based on Ridgway *et al.* (1997), is a conservative value for the onset of a minor TTS in hearing. Ridgway *et al.*'s (1997) measurement at one-second duration implies that the TTS threshold for a 100-second signal would be between 182 and 172 dB, depending upon the formula used (Navy, 1999). The Navy believes that the 180-dB single ping equivalent (SPE) criterion can be considered conservative. However, as mentioned previously in this document, in order for marine mammals to incur serious injury, the RL would need to be significantly higher, and therefore, the marine mammal would have to be much closer to the SURTASS LFA sonar array than the 1 km (0.54 nm) radius around the vertical array which delineates the 180 dB sound field. With three levels of mitigation monitoring for detecting marine mammals (described later in this document (see Mitigation)), it is unlikely that any marine mammal would get that close before either turning away from the annoyance, or being detected and the SURTASS LFA sonar shut down. However, because the probability is not zero, the Navy has included this scenario in its authorization request.

Because the LFS SRP failed to document any extended biologically significant response at maximum RLs up to 150 dB, the Navy determined that there was a 2.5-percent value of a risk of an animal incurring a disruption of biologically important behavior at an SPL of 150 dB, a 50-percent risk at 165 dB, and a 95-percent risk at 180 dB.

This analysis of risk is used by the Navy as an alternative to an all-or-nothing use of standard thresholds for the onset of either behavioral change or injury. The subsequent discussion of risk function emphasizes the advantages of using a smoothly varying model of biological risk in relation to sound exposure. However, for the purposes of estimating the number of individuals that could potentially be injured from SURTASS LFA sonar operations, this

document uses a simpler calculation. Given the low numbers of individual marine mammals that could potentially experience high received levels, the added complexity of an "injury continuum" was not deemed necessary by the Navy.

When SURTASS LFA sonar transmits, there is a boundary which will enclose a volume in which received levels exceed 180 dB, and a volume outside this boundary which experiences received levels below 180 dB. In this analysis, the 180-dB boundary is emphasized because it represents a single-ping RL that can be considered to be a scientifically reasonable estimate for the potential onset of harm or injury. Therefore, the level of risk for marine mammals depends on their location in relation to SURTASS LFA sonar. As mentioned previously, the Navy scientific team established the threshold for risk of harm as a single ping at 180 dB (Navy, 1999b). Harm was defined in this context as onset TTS. Under the Navy proposal, a marine mammal would have to receive one ping greater than, or equal to 180 dB or many pings at a slightly lower RL to potentially incur non-serious injury. For serious injury, the animal would have to be well within the 180-dB sound field at the onset of a transmission.

However, NMFS scientists and other scientists are in general agreement that TTS is not an injury (i.e., does not result in tissue damage) but is an impairment to hearing (resulting in an increased elevation in hearing sensitivity) that may last for a few minutes to a few days, depending upon the level and duration of exposure. In addition, there is no evidence that TTS would occur in marine mammals at an SPL of 180 dB, and, in fact, Schlundt *et al.* (2000) indicates that onset TTS, for at least some species, occurs at significantly higher SPLs. Therefore, in this document, NMFS makes clear that, although TTS is not an injury (i.e., Level A harassment), because PTS is considered an injury (Level A harassment), and because scientists have noted that a range of only 15–20 dB may exist between the onset of TTS and the onset of PTS, TTS is considered by NMFS to be in the upper portion of the Level B harassment zone (near the lower end of the Level A harassment zone). Therefore, onset PTS, not onset TTS, is considered by NMFS to be the lower end of Level A harassment. NMFS believes that establishing TTS at the upper end of the Level B harassment zone is both precautionary and warranted by the science. However, mitigation measures, such as establishing safety zones, should be

applied whenever a marine mammal has the potential to incur a TTS in hearing in order to prevent an animal incurring a PTS injury.

While, the Navy believes that the probability of a marine mammal occurring within the 180-dB sound field at the onset of a transmission is nearly zero because of the proposed monitoring program (described later in this document), because the monitoring is not 100 percent effective, some Level A harassment takings still need to be considered possible.

Before the biological risk standards could be applied to realistic SURTASS LFA sonar operational scenarios, two factors had to be considered by the Navy which resulted in the development of the risk continuum approach: (1) How does risk vary with repeated sound exposure? and (2) how does risk vary with RL? These questions have been addressed by the Navy by developing a function that translates the history of repeated exposures (as calculated in the AIM) into an equivalent RL for a single exposure with a comparable risk. This approach is similar to those adopted by previous studies of risk to human hearing (Richardson *et al.*, 1995; Crocker, 1997).

#### *Effects of Repeated Exposure*

It is intuitive to assume that effects would be greater for repeated exposures than for a single ping. However, because no published data on repeated exposures of LF sound on marine mammals exist, the Navy turned to the most applicable human data. Based on the analysis of Richardson *et al.* (1995) and Kryter (1985), the potential for effects of repeated exposure on marine mammals was modeled on the extensive data available for human subjects. Based on discussion in Richardson *et al.* (1995) and consistent with Crocker (1997), the Navy determined that the best scientific information available is based on human model and, therefore, the formula  $L + 5\log_{10}(N)$  (where L = ping level in dB and N is the number of pings) defines the single ping equivalent (SPE). This formula then is considered appropriate for assessing the risk to a marine mammal from a significant disturbance of a biologically important behavior from LF sound like SURTASS LFA sonar transmissions.

#### *Estimation of Potential Effect to Marine Mammal Stocks*

The potential effects on marine mammals from operation of SURTASS LFA sonar will not cause the direct removal of animals, but may result in a small reduction of an affected individual animal's overall reproductive

success. Based on AIM modeling results, the primary effects are from the potential for a significant disturbance of a biologically important behavior.

To estimate the percentage of marine mammal stocks affected on a yearly basis, the typical annual operating schedule for SURTASS LFA sonar was correlated by the Navy to the modeled site scenarios. Even though the Navy may not have the maximum number of systems operating during the next 5 years, its analysis incorporated four systems with six operations each annually. With two vessels in the Pacific/Indian Ocean area and two vessels in the Atlantic/Mediterranean area, the Navy estimates there could be up to 12 operations in each of these oceanic basin areas. Using a total of 12 operations in each large geographic area (e.g., Eastern North Pacific, Western North Atlantic), the Navy calculated take estimates based on a 20-day exercise (actually under the nominal schedule mentioned previously in this document the Navy proposes two 9-day exercises or a total of 18 days, not 20 days of exercise). NMFS concurs with this approach but notes that because only 2 SURTASS LFA sonar vessels will be available through 2002, possibly 3 vessels during 2003, and possibly 4 vessels during 2004 and 2005, the Navy's projected incidental harassment levels found in the draft OEIS/EIS and application are overestimates of potential harassment levels during the early period of these regulations. NMFS estimates, therefore, that there would be a total of 12 active missions annually during the first two years of these regulations (6 in each ocean basin), 18 during the third year (6 in one ocean basin, 12 in the other), and the maximum of 24 active missions during the last 2 years of these regulations (12 in each of the two ocean basins).

AIM Modeling in Table 4-10 in the application (Table 4.2-10 in the draft OEIS/EIS) provides estimates of the percentage of stocks potentially affected for single SURTASS LFA sonar operations. Tables 4-12 and 4-13 in the application (Tables 4.2-12 and 4.2-13 in the draft OEIS/EIS) provide an example of annual total estimates of percentages of marine mammal stocks potentially affected by a total of 24 operations (12 in each of the two ocean basins). As mentioned previously however, this number of operations are unlikely until the latter part of the effectiveness period of these regulations. Also, because each oceanic area is assumed to contain one or more discrete stocks of each affected species, these estimates are not additive when determining effects on marine mammal

stocks. It should also be recognized that the scenarios chosen by the Navy are not the only possible combinations of where the SURTASS LFA sonar will operate. The potential effects from other scenarios can be estimated by those so wishing to do so by presupposing the areas in which the Navy would conduct SURTASS LFA sonar operations annually in each oceanic basin area, determining from Table 4-10 the percentage of each stock that may potentially be affected, and adding those percentages together for each affected stock. This is what NMFS proposes to do annually for each LOA issued. Also, as pertinent new information becomes available that would improve the Navy model, NMFS anticipates that the Navy could rerun the AIM models and recalculate take estimates. For this document however, NMFS is preliminarily adopting the Navy estimates shown in Tables 4-12 and 4-13 as the best information available in that they are based on the most likely scenario with two systems operating in each of the two oceanic areas. As indicated either by using these two tables, or by choosing a different combination of potential geographic areas for SURTASS LFA sonar operations derived from Table 4-10, NMFS believes that the potential effect by SURTASS LFA sonar operations will be limited to only small percentages of the affected stocks of marine mammals and that potential effect will be limited to incidental harassment that will not adversely affecting the stock through annual rates of recruitment or survival.

#### Mitigation for Marine Mammals

This document preliminarily adopts the Navy proposal to use visual, passive acoustic, and active acoustic monitoring of the area surrounding the SURTASS LFA sonar array to prevent the incidental injury of marine mammals that might enter the 1 km (0.54 nm) safety zone. The three monitoring systems are described in the following section of this document. If a marine mammal (or sea turtle) was detected within the 1 km (0.54 nm) safety zone SURTASS LFA sonar transmissions would be immediately delayed or suspended. Transmissions could commence/resume 15 minutes after the marine mammal/sea turtle had left the area of the 180 dB sound field or there was no further detection of the animal within the 180 dB sound field. The protocol established by the Navy for implementing this temporary shut-down is described in the application (pages 10-11). SURTASS LFA sonar operators would be required to estimate SPLs prior to and during each operation to

provide the information necessary to modify the operation, including delay or suspension of transmissions, in order not to exceed the mitigation sound field criteria.

The Navy has proposed that the SURTASS LFA sonar operations would be conducted to ensure that the sound field does not exceed 180 dB (i.e., the zone of potential for injury to marine mammals) within 12 nm (22 km) of any coastline, including islands, nor in OBIA's that are outside the 12 nm (22 km) zone during the biologically important season(s) for that particular area. It should be noted that the 12 nm (22 km) safety zone restriction includes almost all marine-related critical habitats and National Marine Sanctuaries. Areas critical for marine mammals that are outside this safety zone can be nominated as an OBIA. This process was described earlier in this document.

In addition, to establishing a safety zone at 180 dB to protect marine mammals and other noise sensitive marine animals, the Navy has proposed to establish a safety zone for human divers at 145 dB re 1 microPa(rms) around all known human commercial and recreational diving sites. Although this geographic restriction is intended to protect human divers, its imposition will also reduce the LF sound levels received by marine mammals that are located in the vicinity of known dive sites.

The Navy has proposed establishing OBIA's for marine mammal protection. These areas are defined as those areas of the world's oceans where marine mammals congregate in high densities to carry out biologically important activities such as feeding, migration, breeding, and calving. To date, the U.S. Navy has proposed three sites as OBIA's for SURTASS LFA sonar under these regulations. These areas are: (1) the North American East Coast between 30° N and 50° N from west of 40° W to the 200-m (656 ft) isobath; (2) the Antarctic Convergence Zone, from 20° E to 120° E, south of 55° S, from October through March; and (3) the Costa Rica Dome, centered at 9° N and 88° W, year-round. Also, an area included in this document, at the request of NOAA's National Ocean Service, is Penguin Bank off the Island of Kauai, Hawaii, inside the HIHWNMS. In addition, the Navy in its application, and NMFS in this document, is proposing a system for expanding the list of OBIA's. This process is described in more detail in NMFS' response to comment 25 earlier in this document.

It should be recognized however, that the establishment of OBIA's is not

intended to apply to other Navy activities and sonar operations, but is proposed here as a mitigation measure to reduce incidental takings by SURTASS LFA sonar because it is practical considering SURTASS LFA sonar's offshore operation.

### Monitoring

In order to minimize risks to potentially affected marine mammals that may be present in waters surrounding SURTASS LFA sonar, the Navy has proposed to: (1) Conduct visual monitoring from the ship's bridge during daylight hours, (2) use passive SURTASS LFA sonar to listen for vocalizing marine mammals; and (3) use high frequency active sonar (i.e., similar to a commercial fish finder) to monitor/locate/track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array.

Through observation, acoustic tracking and establishment of shut-down criteria, the Navy will ensure, to the greatest extent practicable, that no marine mammals approach the SURTASS LFA sonar source closely enough to be subjected to potentially harmful sound levels (inside the 180 dB sound field; approximately 1 km (0.54 nm) from the source). The Navy estimates that the probability of detecting a marine mammal within the 180 dB sound field of the source array by at least one of these monitoring methods is between 70 and 99 percent. However, nominally, an effectiveness of 80 percent is used in the take calculations. The Navy's assumption incorporates the 70-percent effectiveness of the HFM3 sonar, and an additional conservative 5-percent contribution each for visual and passive monitoring. In general, the Navy believes that small, solitary marine mammals would be the most difficult to detect, while large whales and dolphin schools would be much easier to detect. However, as stated previously in this document, NMFS will not consider the effectiveness of the HFM3 sonar in reducing the incidental take of marine mammals by the SURTASS LFA sonar until such time as the Navy has demonstrated its effectiveness. In the meantime, NMFS will adopt only the geographic mitigation as being effective in reducing takes.

NMFS has reviewed this Navy proposal and believes that the proposal can be modified to provide additional protection for marine mammals. Because the HFM3 has the capability to detect marine mammals, and track them, to a distance of 2 km (1.1 nm) from the source, NMFS is proposing to

require the Navy to terminate transmissions whenever a marine mammal can receive a calculated SPE of 180 dB within the zone of detectability. This will require, however, both that the marine mammal remains within the zone of detectability between "pings" while the vessel is underway, and for the Navy to continue to monitor the 2 km (1.1 nm) zone between pings. Because the time between "pings" is 6–15 minutes, and the Navy has already committed to visual and acoustic monitoring for no less than 30 minutes prior to a "ping," monitoring will continue during the interim period and marine mammals will continue to be tracked.

### Reporting

During routine operations of SURTASS LFA sonar, technical and environmental data would be collected and recorded. These would include data from visual and acoustic monitoring, ocean environmental measurements, and technical operational inputs. This information would become part of the data required from the LTM Program.

### Research

The Navy proposes to provide a LTM program to conduct annual assessments of the potential cumulative impact of SURTASS LFA sonar operations on the marine environment, provide the necessary reporting to increase knowledge of the species, and to coordinate research opportunities and activities. This would include cumulative impact analyses of the annually tabulated injuries (if any) and harassments over the next 5 years. The purpose of the LTM program would be to continue scientific data collection once SURTASS LFA sonar is deployed.

While NMFS believes that research conducted to date is sufficient to assess impacts on those species of marine mammals that were identified in public meetings as most susceptible to LF noise, it believes that it would be prudent to continue research over the course of the period of effectiveness of these regulations.

### Proposed LOA Conditions

The proposed regulations have been designed to allow many of the mitigation, monitoring and reporting requirements to be detailed in the LOA, rather than in these regulations. This has been done to provide NMFS the ability to change these protective measures in a prompt manner to changing conditions. While public comment will be provided for substantial modifications to LOA requirements before being made

effective, modifications can be implemented in a shorter period of time if contained in LOAs than would be possible if rulemaking were required for each modification. It should be understood that the public would be provided a comparable length of time for commenting on LOA modifications (except when NMFS determines that an emergency exists which impacts on the health and welfare of the marine mammal), whether or not those requirements were contained in regulations. However, for security reasons, locations and times for certain operations may need to be classified and not provided to the public.

In the past, NMFS has promulgated rulemakings for small take authorizations that did not clearly describe LOA conditions. For this activity NMFS plans the following conditions (in addition to, or in clarification of, those found in these regulations).

(1) Prior to each exercise, the marine mammal safety zone will be measured to determine the distance from the source to the 180-dB isopleth. That distance will be the established safety zone for that exercise; and

(2) The Navy must test the effectiveness of HFM3 at detecting marine mammals within 0.5 km (0.3 nm), 1 km (0.54 nm) and 2 km (1.1 nm) of the source. A report must be provided to NMFS not later than 120 days prior to the expiration of the first LOA.

### Designation of Biologically Important Marine Mammal Areas

NMFS is proposing to establish a system under this proposed rule for the public to be able to propose areas for NMFS to consider adding to the list of biologically important areas for marine mammals. NMFS emphasizes that, in order for designation, an area must be of particular importance for marine mammals as an area for primary feeding, breeding, or migration, and not simply an area occupied by marine mammals. The proposed area should also not be within a previously designated area. In order for NMFS to begin the rulemaking process for designating areas of biological importance for marine mammals, proponents must petition NMFS and submit the information described in § 216.191(a). If NMFS makes a preliminary determination that the area is biologically important for marine mammals, NMFS will propose rulemaking to add the recommended area to the list of previously designated areas. Through notice in the **Federal Register**, NMFS will invite information, suggestions, and comments on the proposal for a period of time not less

than 45 days from the date of publication in the **Federal Register**. After review of the comments and information, NMFS will make a final decision on whether to add the recommended area to the list found in § 216.183(d). NMFS will either issue a final rulemaking on the proposal or provide notice in the **Federal Register** on its determination. It should be understood however, that proposals for designation of areas will not affect the status of LOAs while the rulemaking is in process. NMFS anticipates that the time between nominating an area and publication of a final determination is likely to take 8-12 months.

### Preliminary Conclusions

Based on the scientific analyses detailed in the Navy application and further supported by information and data contained in the Navy's draft OEIS/EIS for SURTASS LFA sonar operations, NMFS concurs with the Navy that the incidental taking of marine mammals resulting from SURTASS LFA sonar operations would result in only small numbers (as the term is defined in § 216.103) of marine mammals being taken, have no more than a negligible impact on the affected marine mammal stocks or habitats and not have an unmitigable adverse impact on Arctic subsistence uses of marine mammals. These conclusions are particularly supported by the proposed mitigation measures that would be implemented for all SURTASS LFA sonar operations and the proposed LTM program. This includes geographic operation restrictions, mitigation measures to prevent injury to any marine mammals, monitoring and reporting and supplemental research that will result in increased knowledge of marine mammal species, and the potential impacts of LF sound on these species. The latter measures offer the means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing the incidental taking of marine mammals from anthropogenic underwater sound, and evaluating the possible long-term effects from exposing marine mammals to anthropogenic underwater sound.

In addition to the mitigation measures described previously, the following factors need to be considered when determining whether a taking would be negligible: (1) The small number of SURTASS LFA sonar systems that will be operating world-wide; (2) the vessel must be underway while transmitting (in order to keep the receiver array deployed); (3) the low duty cycle and short mission periods; and (4) the possibility of a marine mammal being

within the 180-dB sound field during sonar transmissions is unlikely.

### Information Solicited

NMFS requests interested persons and organizations to submit comments, information, and suggestions concerning the content of the proposed regulations to authorize the taking. All commenters are requested to review the application prior to submitting comments and not submit comments solely on this **Federal Register** document. Comments on issues not relevant to either the potential impact of SURTASS LFA sonar on marine mammals or NMFS' responsibilities under the MMPA will not be considered.

### NEPA

On July 30, 1999 (64 FR 41420), the Environmental Protection Agency (EPA) announced receipt of a draft OEIS/EIS from the U.S. Navy on the deployment of SURTASS LFA sonar. The public comment period on the Draft EIS ended on October 28, 1999. On February 2, 2001 (65 FR 8788), EPA announced receipt of a final OEIS/EIS from the U.S. Navy on the deployment of SURTASS LFA sonar. NMFS is a cooperating agency, as defined by the Council on Environmental Quality (40 CFR 1501.6), in the preparation of these documents.

### ESA

NMFS will be consulting with the U.S. Navy under section 7 of the ESA on this action. In that regard, on October 19, 1999, the Navy has submitted to NMFS a Biological Assessment under the ESA. This consultation will be concluded prior to a determination on issuance of a final rule and exemption.

### Classification

This action has been determined to be significant for purposes of E.O. 12866. NMFS has preliminarily determined that this rule, if implemented, will provide NMFS and the public, through the Navy's monitoring and research program, with information on the SURTASS LFA sonar system's effect on the marine environment, especially on marine mammals. Without an authorization under the MMPA, NMFS and the public are unlikely to receive this information. NMFS believes that obtaining this information is extremely important because SURTASS LFA sonar is not the only LF noise source in the world's oceans, and the scientific findings resulting from monitoring and research is likely to be directly applicable to other activities. In addition, this rule, if implemented, and any LOAs issued thereunder, would impose appropriate mitigation measures

for protecting marine mammals, sea turtles and other marine life. Without these regulations and LOAs, mitigation measures could not be required to be undertaken by the U.S. Navy.

While a determination to eventually deploy the SURTASS LFA sonar system will be made by the Navy, NMFS notes that additional benefits for implementing this proposed rule is an increased level of national defense, and improved survivability of U.S. armed forces at sea, and the Navy's associated multi-billion dollar naval assets. The cost to the Navy cannot be fully determined at this time but these costs would be incurred through implementation of the LTM and LTR programs that will be required under this proposed rule. Preliminarily, NMFS believes that this cost would be approximately \$ 1 million annually.

The Assistant General Counsel for Legislation and Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, will not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act. If implemented, this proposed rule would affect only the U.S. Navy which, by definition, is not a small business. It will also affect a small number of contractors providing services related to reporting the impact of SURTASS LFA sonar on marine mammals. Some of the affected contractors may be small businesses, but the number involved would not be substantial. Further, since the research and reporting requirements are what would lead to the need for their services, the economic impact on them would be beneficial. Because of this certification, a regulatory flexibility analysis is not required.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act (PRA) unless that collection of information displays a currently valid OMB control number. This proposed rule contains collection-of-information requirements subject to the provisions of the PRA. These requirements have been approved by OMB under control number 0648-0151, and include applications for LOAs, and an annual report. Other information requirements in the rule are not subject to the PRA since they apply only to a single entity and therefore are not contained in a rule of general applicability.

The reporting burden for the approved collections-of-information are preliminarily estimated to be approximately 80 hours for each annual application for a LOA (total of 2 in FY2001-FY2002, 3 in FY 2003, and 4 in FY 2004), and 80 hours each for interim and final reports. These estimates include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection-of-information. Send comments regarding these burden estimates, or any other aspect of this data collection, including suggestions for reducing the burden, to NMFS and OMB (see ADDRESSES).

#### List of Subjects in 50 CFR Part 216

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: March 12, 2001.

**Rolland A. Schmitt,**

*Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.*

For reasons set forth in the preamble, 50 CFR part 216 is proposed to be amended as follows:

#### PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

1. The authority citation for part 216 continues to read as follows:

**Authority:** 16 U.S.C. 1361 *et seq.*, unless otherwise noted.

2. A definition for "single ping equivalent" is added in alphabetic order to § 216.103 to read as follows:

##### § 216.103 Definitions.

\* \* \* \* \*

*Single ping equivalent* means the summation of the intensities for all received brief acoustic sound into an equivalent exposure from one ping, which is always at a higher level than the highest individual ping received. It is a methodology used during acoustic modeling of potential impacts to marine mammals exposed to sonar signals. This method estimates the total exposure of each individually modeled mammal, which was exposed to multiple pings over an extended period of time.

3. Subpart Q is added to part 216 to read as follows:

#### Subpart Q—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar

Sec.

- 216.180 Specified activity and specified geographical region.
- 216.181 Effective dates.
- 216.182 Permissible methods of taking.
- 216.183 Prohibitions.
- 216.184 Mitigation.
- 216.185 Requirements for monitoring.
- 216.186 Requirements for reporting.
- 216.187 Applications for Letters of Authorization.
- 216.188 Letters of Authorization.
- 216.189 Renewal of Letters of Authorization.
- 216.190 Modifications to Letters of Authorization.
- 216.191 Designation of Biologically Important Marine Mammal Areas.

#### Subpart Q—Taking of Marine Mammals Incidental to Navy Operations of Surveillance Towed Array Sensor System Low Frequency Active Sonar

##### § 216.180 Specified activity and specified geographical region.

Regulations in this subpart apply only to the incidental taking of those marine mammal species specified in paragraph (b) of this section by the U.S. Navy, Department of Defense, engaged in the operation of SURTASS LFA sonar operations, in areas specified in paragraph (a) of this section. The authorized activities, as specified in a Letter of Authorization issued under §§ 216.106 and 216.188, include the transmission of low frequency sounds from the SURTASS LFA sonar, and the transmission of high frequency sounds from the mitigation sonar, described in § 216.185 during training, testing, and routine military operations of SURTASS LFA sonar.

(a) With the exception of those areas specified in § 216.183(d), the incidental taking by harassment may be authorized in the following areas as specified in a Letter of Authorization:

- (1) North Atlantic Ocean,
  - (i) Western North Atlantic, from 35° N. lat. north to a line between Cape Chidley, Labrador northeast to Nuuk, Greenland, and from the North American continent east to 41° W. long. (Area A),
  - (ii) Eastern North Atlantic, from 35° N. lat. north to 72° N. lat. and 41° W. long. east to the European continent (Area B),
  - (2) Mediterranean Sea (Area C),
  - (3) North Pacific Ocean,
    - (i) Western North Pacific, from 20° N. lat. north to the Aleutian Island chain and the Sea of Okhotsk, and from the Asian continent east to 175° W. long. (Area D),
    - (ii) Eastern North Pacific, from 42° N. lat. north to Alaska and the south side

of the Aleutian Islands and from the North American continent west to 175° W. long. (Area E),

(4) Central Atlantic Ocean,
 

- (i) Eastern Central Atlantic, from 7° S. lat. north to 35° N. lat. and from the African continent west to 40° W. long. between 5° N. lat. and 35° N. lat., to 30° W. long. between 0° lat. and 5° N. lat., and to 20° W. long. between 7° S. lat. and 0° lat. (Area F),

(ii) Western Central Atlantic, from 5° N. lat. north to 35° N. lat., and from the American continent, east to 40° W. long. (Area G),

(5) Indian Ocean,
 

- (i) Eastern Indian Ocean, from 60° S. lat. north to the Bay of Bengal, and Asian continent, and from 80° E. long. east to the Asian continent, the Sunda Islands and Australia and to 150° E. long. (Area H1),

(ii) Western Indian Ocean, from 60° S. lat. north to the Arabian Sea, and from 30° E. long. east to 80° E. long. (Area H2),

(6) Central Pacific Ocean,
 

- (i) Western Central Pacific, from 175° W. long., east to the Asian continent and Indonesia, and from 10° S. lat., north to 20° N. lat. (Area I),

(ii) Central Pacific, from 10° S. lat., north to 42° N. lat. between 175° W. long. and 130° W. long. (Area J1),

(iii) Eastern Central Pacific, from 5° S. lat. north along the American coastline to 42° N. lat., from 130° W. long. along 10° S. lat. to 105° W. long., from 10° S. lat. along 105° W. long. to 5° S. lat., from 105° W. long. along 5° S. lat. to the South American coastline, from 130° W. long. along 42° N. lat. to the North American coastline and from 42° N. lat. to 10° S. lat. along the 130° W. long. line (Area J2),

(7) South Pacific Ocean,
 

- (i) Western South Pacific from 60° S. lat. north to 10° S. lat. and from the east coast of Australia in the north and 150° E. long. south of Australia east to 105° W. long. (Area K),

(ii) Eastern South Pacific from 60° S. lat. north to 5° S. lat. and from the 105° W. long. east to the South American coastline in the north and 70° W. long. in the south (Area L),

(8) South Atlantic Ocean,
 

- (i) Western South Atlantic, from 60° S. lat. north to 5° N. lat. in the area west of 30° W. long., and from 60° S. lat. north to 0° lat. in the area east of 30° W. long. and from the South American continent east to 30° W. long. between 0° and 5° N. lat. and east to 20° W. long. between 0° and 60° S. lat. (Area M), and

(ii) East South Atlantic from 50° S. lat. north to 7° S. lat. and from 20° W. long. east to the African coastline in the north and 30° E. long. south of the continent (Area N).

(b) The incidental take by harassment and non-serious injury of marine

mammals under the activity identified in this section is limited to the following species and species groups:

(i) Mysticete whales, including, blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), minke whale (*Balaenoptera acutorostrata*), Bryde's whale (*Balaenoptera edeni*), sei whale (*Balaenoptera borealis*), humpback whale (*Megaptera novaeangliae*), northern right whale (*Eubalaena glacialis*), southern right whale (*Eubalaena australis*), pygmy right whale (*Caperea marginata*), and gray whales (*Eschrichtius robustus*).

(ii) Odontocete whales, including Risso's dolphin (*Grampus griseus*), rough-toothed dolphin (*Steno bredanensis*), Fraser's dolphin (*Lagenodelphis hosei*), right-whale dolphin (*Lissodelphis spp.*), bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), beluga whale (*Delphinapterus leucas*), *Stenella spp.*, *Lagenorhynchus spp.*, *Cephalorhynchus spp.* melon-headed whale (*Peponocephala spp.*), beaked whales (*Berardius spp.*, *Hyperoodon spp.*, *Mesoplodon spp.*), Cuvier's beaked whale (*Ziphius cavirostris*), Shepard's beaked whale (*Tasmacetus shepherdi*), Longman's beaked whale (*Indopacetus pacificus*), killer whale (*Orcinus orca*), false killer whale (*Pseudorca crassidens*), pygmy killer whale (*Feresa attenuata*), sperm whale (*Physeter macrocephalus*), dwarf and pygmy sperm whales (*Kogia simus* and *K. breviceps*), and short-finned and long-

finned pilot whales (*Globicephala macrorhynchus* and *G. melas*).

(iii) Pinnipeds, including harbor seals (*Phoca vitulina*), spotted seals (*P. largha*), ribbon seals (*P. fasciata*), gray seals (*Halichoerus grypus*), hooded seal (*Cystophora cristata*), elephant seals (*Mirounga angustirostris* and *M. leonina*), Hawaiian monk seals (*Monachus schauinslandi*), Mediterranean monk seals (*Monachus monachus*), northern fur seals (*Callorhinus ursinus*); southern fur seals (*Arctocephalus spp.*), Steller sea lions (*Eumetopias jubatus*), California sea lions (*Zalophus californianus*), Australian sea lions (*Neophoca cinerea*), New Zealand sea lions (*Phocarctos hookeri*), and South American sea lions (*Otaria flavescens*).

#### § 216.181 Effective dates.

Regulations in this subpart are effective from May 1, 2001, through April 30, 2006.

#### § 216.182 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to §§ 216.106 and 216.188, the Holder of the Letter of Authorization may incidentally, but not intentionally, take marine mammals by harassment and non-serious injury within the area described in § 216.180(a), provided the activity is in compliance with all terms, conditions, and requirements of these regulations and the appropriate Letter of Authorization.

(b) The activities identified in § 216.180 must be conducted in a manner that minimizes, to the greatest

extent practicable, any adverse impacts on marine mammals, their habitat, and on the availability of marine mammals for subsistence uses.

#### § 216.183 Prohibitions.

Notwithstanding takings authorized by § 216.180 and by a Letter of Authorization issued under §§ 216.106 and 216.188, no person in connection with the activities described in § 216.180 shall:

(a) Take any marine mammal not specified in § 216.180(b);

(b) Take any marine mammal specified in § 216.180(b) other than by incidental, unintentional harassment or non-serious injury;

(c) Take any marine mammal while operating under a Letter of Authorization in either a non-operating area, indicated in Figure 1, or in a geographic operating area for which an authorization for taking has not been issued under a Letter of Authorization;

(d) Operate the SURTASS LFA sonar while under a Letter of Authorization, such that the SURTASS LFA sonar sound field exceeds 180 dB (re 1 micro Pa(rms)) within 12 nautical miles (22 kilometers) of any coastline, including offshore islands, or any designated offshore area that is biologically important for marine mammals that exist outside the 12 nautical miles (22 kilometers) zone during the biologically important season for that particular area.

(e) The following areas have been designated by NMFS as offshore areas of critical biological importance for marine mammals (by season if appropriate):

Name of Area	Location of Area	Months of Importance
(1) 200-m isobath North American East Coast	From 30° N to 50° N west of 40° W	Year-Round
(2) Antarctic Convergence Zone	30° E to 80° E:45° S 80° E to 150° E:55° S 150° E to 50° W:60° S 50° W 30° E:50° S	October through March
(3) Costa Rican Dome	Centered at 9° N and at 88° W	Year-round; no resident population
(4) Penguin Bank	Centered at 22° N and at 159°	November 1 through May 1

(f) Take a marine mammal specified in § 216.180(b) if such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(g) Violate, or fail to comply with, the terms, conditions, and requirements of these regulations or a Letter of Authorization issued under §§ 216.106 and 216.188.

#### § 216.184 Mitigation.

The activity identified in § 216.180(a) must be conducted in a manner that minimizes, to the greatest extent

practicable, adverse impacts on marine mammals and their habitats. When conducting operations identified in § 216.180, the mitigation measures described in this paragraph and in the Letter of Authorization issued under §§ 216.106 and 216.188 must be implemented.

(a) Through monitoring described under § 216.185, the Holder of a Letter of Authorization will ensure, to the greatest extent practicable, that no marine mammal is subjected to a single ping equivalent of 180-dB within the 180-dB re 1 micro Pa(rms) sound field.

(b) If a marine mammal is detected within the 180-dB safety zone, SURTASS LFA sonar transmissions will be immediately suspended. Transmissions will not resume earlier than 15 minutes after:

(1) All marine mammals have left the area of the 180-dB re 1 micro Pa(rms) sound field; and

(2) There is no further detection of the animal within the 180-dB re 1 micro Pa(rms) sound field as determined by the visual and/or passive or active acoustic monitoring described in § 216.185.

(c) The HFM3 source, described in § 216.185 will be ramped-up slowly to operating levels over a period of no less than 5 minutes:

(1) No later than 30 minutes before the first SURTASS LFA sonar transmission;

(2) Prior to any SURTASS LFA sonar calibrations or testings that are not part of regular SURTASS LFA sonar transmissions described in paragraph (c)(1) of this section; and

(3) Anytime after the HFM3 source has been powered down for a period of time greater than 2 minutes.

**§ 216.185 Requirements for monitoring.**

(a) In order to mitigate the taking of marine mammals by SURTASS LFA sonar to the greatest extent practicable, the Holder of a Letter of Authorization must:

(1) Conduct visual monitoring from the ship's bridge during daylight hours;

(2) Use low frequency passive SURTASS LFA sonar to listen for vocalizing marine mammals; and

(3) Use high frequency active sonar to locate and track marine mammals in relation to the SURTASS LFA sonar vessel and the sound field produced by the SURTASS LFA sonar source array.

(b) Pursuant to (a)(1)-(3) of this section monitoring must:

(1) Commence no later than 30 minutes before the first SURTASS LFA sonar transmission;

(2) Continue between transmission pings; and

(3) Continue for at least 15 minutes after completion of the SURTASS LFA sonar transmission exercise;

(c) Holders of Letters of Authorization issued pursuant to §§ 216.106 and 216.188 for activities described in § 216.180 are required to cooperate with the National Marine Fisheries Service, and any other Federal, state or local agency monitoring the impacts of the activity on marine mammals.

(d) Holders of Letters of Authorization must designate qualified on-site individuals to conduct the mitigation, monitoring and reporting activities specified in the Letter of Authorization issued pursuant to § 216.106 and § 216.188.

(e) Holders of Letters of Authorization must conduct all monitoring and/or research required under the Letter of Authorization.

**§ 216.186 Requirements for reporting.**

(a) The Holder of a Letter of Authorization must submit an interim report to the Director, Office of Protected Resources, National Marine Fisheries Service, no later than 90 days prior to expiration of the Letter of

Authorization. This report must contain all the information required by the Letter of Authorization.

(b) A final comprehensive report must be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service at least 240 days prior to expiration of these regulations. This report must contain all the information required by any final year Letter of Authorization.

**§ 216.187 Applications for Letters of Authorization.**

(a) To incidentally take marine mammals pursuant to these regulations, the U.S. Navy authority that is conducting the activity identified in § 216.180, must apply for and obtain a Letter of Authorization in accordance with §§ 216.106 and 216.188.

(b) The application for an initial, or a renewal of, a Letter of Authorization must be submitted to the Director, Office of Protected Resources, National Marine Fisheries Service, at least 90 days before the date that either the vessel is scheduled to begin conducting SURTASS LFA sonar operations or the previous Letter of Authorization is scheduled to expire.

(c) All applications for a Letter of Authorization must include the following information:

(1) The date(s), duration, and the specified geographical region where the vessel's activity described in § 216.180 will occur;

(2) The species and/or stock(s) of marine mammals likely to be found within each specified geographical region;

(3) The type of incidental taking authorization that is being requested (i.e., take by Level A and/or Level B harassment);

(4) The estimated percentage of marine mammal species/stocks potentially affected in each specified geographic region and for the 12-month period of effectiveness of the Letter of Authorization; and

(5) The means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species, the level of taking or impacts on populations of marine mammals.

(d) NMFS will review an application for a Letter of Authorization in accordance with § 216.104(b) and, if adequate and complete, issue a Letter of Authorization for a period of time not to exceed 1 year.

**§ 216.188 Letters of Authorization.**

(a) A Letter of Authorization, unless suspended or revoked will be valid for a period of time not to exceed one year,

but may be renewed annually subject to annual renewal conditions in § 216.189.

(b) Each Letter of Authorization will set forth:

(1) Permissible methods of incidental taking;

(2) Authorized geographic areas for taking;

(3) Means of effecting the least practicable adverse impact on the species of marine mammals authorized for taking, its habitat, and on the availability of the species for subsistence uses; and

(4) Requirements for monitoring and reporting incidental takes.

(c) Issuance of each Letter of Authorization will be based on a determination that the number of marine mammals taken by the activity will be small, that the total number of marine mammals taken by the activity, specified in § 216.180, as a whole will have no more than a negligible impact on the species or stock of affected marine mammal(s), and that the total taking will not have an unmitigable adverse impact on the availability of species or stocks of marine mammals for taking for subsistence uses.

(d) Notice of issuance or denial of a Letter of Authorization will be published in the **Federal Register** within 30 days of a determination.

**§ 216.189 Renewal of Letters of Authorization.**

(a) A Letter of Authorization issued under § 216.106 and § 216.188 for the activity identified in § 216.180 will be renewed annually upon:

(1) Notification to the National Marine Fisheries Service that the activity described in the application submitted under § 216.187 will be undertaken and that there will not be a substantial modification to the described work, mitigation or monitoring undertaken during the upcoming season;

(2) Notification to the National Marine Fisheries Service of the information items identified in § 216.187(c), including the planned geographic area(s), and anticipated duration of each SURTASS LFA sonar operation;

(3) Timely receipt of the monitoring reports required under § 216.185, which have been reviewed by the National Marine Fisheries Service and determined to be acceptable;

(4) A determination by the National Marine Fisheries Service that the mitigation, monitoring and reporting measures required under §§ 216.184 and 216.185 and the Letter of Authorization were undertaken and will be undertaken during the upcoming annual period of validity of a renewed Letter of Authorization; and

(5) Renewal of a Letter of Authorization will be based on a determination that the number of marine mammals taken by the activity continues to be small, that the total number of marine mammals taken by the activity, specified in § 216.180, as a whole will have no more than a negligible impact on the species or stock of affected marine mammal(s), and that the total taking will not have an unmitigable adverse impact on the availability of species or stocks of marine mammals for taking for subsistence uses.

(b) If a request for a renewal of a Letter of Authorization issued under §§ 216.106 and 216.188 indicates that a substantial modification to the described work, mitigation or monitoring will occur during the upcoming season, or if the National Marine Fisheries Service proposes a substantial modification to the Letter of Authorization, the National Marine Fisheries Service will provide the public a period of 30 days for review and comment on the requested modification. Amending the list of areas for upcoming SURTASS LFA sonar operations is not considered a substantial modification to the Letter of Authorization.

(c) A notice of issuance or denial of a renewal of a Letter of Authorization will be published in the **Federal Register** within 30 days of a determination.

#### **§ 216.190 Modifications to Letters of Authorization.**

(a) In addition to complying with the provisions of §§ 216.106 and 216.188, except as provided in paragraph (b) of this section, no substantive modification (including withdrawal or suspension) to the Letter of Authorization issued pursuant to §§ 216.106 and 216.188 and subject to the provisions of this subpart shall be made by the National Marine Fisheries Service until after notification

and an opportunity for public comment has been provided. For purposes of this paragraph, a renewal of a Letter of Authorization under § 216.189, without modification, except for the period of validity and a listing of planned operating areas, or for moving the authorized SURTASS LFA sonar system from one ship to another, are not considered substantive modifications.

(b) If the Assistant Administrator determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 216.180(b), a Letter of Authorization issued pursuant to §§ 216.106 and 216.188 may be substantively modified without prior notification and an opportunity for public comment. Notification will be published in the **Federal Register** within 30 days subsequent to the action.

#### **§ 216.191 Designation of Biologically Important Marine Mammal Areas.**

In order for the National Marine Fisheries Service to designate areas that are considered of biological importance for marine mammals under this rule, proponents must petition the Agency by requesting an area be added to the list of biologically important areas in § 216.183(d) and submitting the following information:

(a) Geographic region proposed for consideration (including geographic boundaries) as an area of importance,

(b) A list of marine mammals, within the proposed geographic region,

(c) Whether the proposal is for year-round designation or seasonal, and if seasonal, months of years for proposed designation, and

(d) Detailed information on the biology of marine mammals within the area including estimated population size, distribution, density, status; and principal biological activity during the proposed period of designation of the area sufficient for the National Marine Fisheries Service to make a preliminary

determination that the area is biologically important for marine mammals.

(e) In order for the National Marine Fisheries Service to designate an area as an offshore area of biological importance for marine mammals under this subpart, the petitioner will need to provide detailed information on the area in regards to its importance for marine mammals for either primary feeding, breeding, or migration for those species of marine mammals that have the potential to be affected by low frequency sounds;

(f) Proposed areas that are within 12 nautical miles (22 kilometers) of any coastline including offshore islands, or within non-operating areas for SURTASS LFA sonar shown in Figure 1 will not be eligible for consideration under this section;

(g) If the National Marine Fisheries Service makes a preliminary determination that the area is biologically important for marine mammals and, that area is not located within a previously designated area, the National Marine Fisheries Service will propose rulemaking to add the recommended area to § 216.183(d).

(h) Through notice in the **Federal Register**, the National Marine Fisheries Service will invite information, suggestions, and comments on the proposal for a period of time not less than 45 days from the date of publication in the **Federal Register**.

(i) After review of the comments and information, the National Marine Fisheries Service will make a final decision on whether or not to add the recommended area to the list found in § 216.183(d). The National Marine Fisheries Service will either issue a final rulemaking on the proposal or provide notice in the **Federal Register** on its determination.

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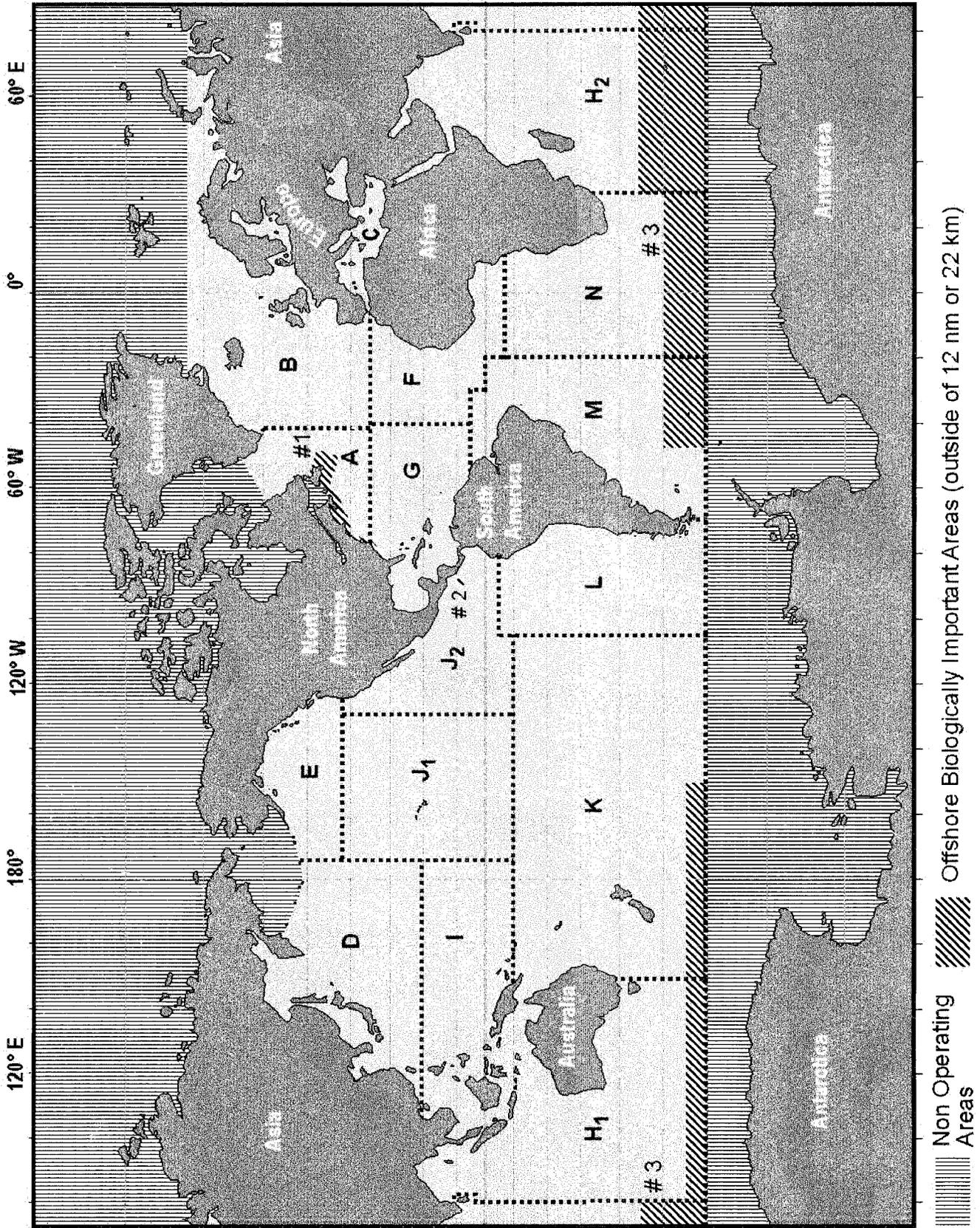


Figure 1-1. SURTASS LFA Sonar Potential Operating Areas.